.

# RESULT

OF

# ASTRONOMICAL OBSERVATIONS

MADE AT

THE HONORABLE,

THE EAST INDIA COMPANY'S OBSERVATORY

AT MADRAS.

BY

THOMAS GLANVILLE TAYLOR Esq.

ASTRONOMER TO THE HONORABLE COMPANY.

## VOL. V.

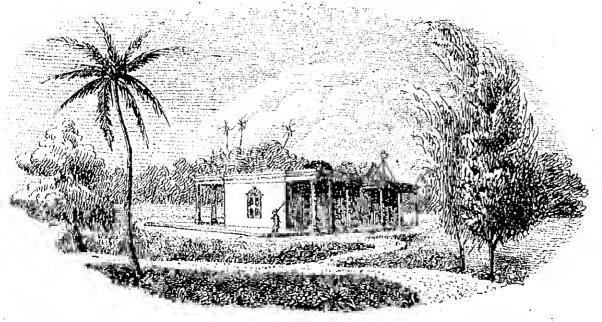
FOR THE YEARS 1838 AND 1839.

PRINTED

BY ORDER OF THE

MADRAS GOVERNMENT.





MADRAS:

PRINTED BY R. W. THORPE,

AT THE VEPPRY MISSION PERSO, CHURCH STREET-VEPCRY,

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#### PREFACE.

The present volume it will be observed, differs from those which have preceded it in one or two essential points, which circumstance and the cause, it is necessary here to explain. The printing of the Catalogue now given was commenced about the middle of the year 1839, when the stars situated near to 0 hours of Right Ascension had been observed; and towards the end of November, the printing of the Catalogue as well as the Observations contained in it were together completed. ceeding with the reductions of the observations of the Sun and the usual comparison with the Nautical Almanae, the same want of accordance between the errors of the tablos from day to day as had hitherto been met with-continued to occur; The distances of the Planet Mars too, from stars situated in his neighbourhood, were as ill accordant as ever, and the distances of fixed Stars from one another, separated by a degree or two only of space—when compared with similar observations at other Observatories, occasionally exhibited discrepancies to the amount of several seconds of space! In fact it was evident--either that the Observations made by myself or those made by other observers were in error, or, that the fault laid with the instruments with which the observations had been made. I had already, on two occasions, determined that the errors of division of every fifth degree of the Madras Mural Circle were of small amount, and had ascertained in the usual way, that several promiscuous divisions were situated within a trifling and insignificant amount of 180° from those which should be opposite to them, but hitherto no systematic examination had been carried beyond this. Thus circumstanced, I resolved to examine rigidly the errors of each single degree, not as had been done hitherto-by comparing the several divisions with those at 90° or 180° distance, but by comparing strictly each pair of opposite divisions with those joining the divisions 0° and 180°. The result of this examination has shewn, that in addition to easual errors, there exists a uniform and systomatic amount of error—that nearly every division on the circle is situated in advance of its proper place relative to the diameter 0°-180°, and that in some eases, the combined errors amount to nearly ten seconds! I now proceeded to the examination of the divisions at 15, 30, & 45 minutes, and eventually extended it to each 5 minutes of the circle, as is fully explained in the propor place. The time oceupied in this investigation (which has been gone twice over), and the nature of the result arrived at, has necessarily prevented me from proceeding with the reductions of the observations of the Sun and Planets, and now that I am somewhat at liberty to proceed with these, the appearance of an ununexpected visitor (the Comet) added to the circumstance of my approaching departure for England, renders it unavoidable—but that the present volume should be given as far it goes, leaving it to my successor to give in a future volume what is omitted in the present one.

But to return to the subject of error of Division:—the correction of from sixty to eighty thousand observations which have already been made with the Circle, is a work which I almost despair of seeing accomplished speedily,—in which case, with a view to repair the existing errors to a serviceable extent, I have given a table of corrections to be applied to any given result (depending upon the division employed) on the supposition of the Index Error being subject throughout to an average error, a condition to which it necessarily must approximate: and for the observations which may hereafter be made, the present known errors of each division, will without doubt—render the results which may be arrived at, fully as accurate as if the best attainable division had been trusted to: and, considering the difficulty of effecting division to ultimate accuracy, will it not in future be much the best and safest plan, to trust to ordinary engine dividing, and let every Astronomer find the errors of division of his own Instrument before using it?

T. G. TAYLOR, H. C. ASTRONOMER.

MADRAS OBSERVATORY, 20th January 1840.

#### ON THE OBSERVATIONS OF THE FIXED STARS IN 1638-1839.

The observations of the fixed Stars in 1838 and 1839, have been particularly and solely directed to those situated in the Southern Hemisphere: a step I was induced to follow, in consequence of the recommendation of Sir J. F. W. Herschel to that effect, and further-from the consideration that the catalogue of stars which had lately been published from Sir Thomas Brisbane's observations at Paramatta, (the only modern catalogue of Southern Stars) had been derived principally from a single obsorvation only, whereby it must be expected that error had occasionally intruded; added to which, the determinations of A. R. exhibited a general and not very regular series of minus errors, which rendered a re-observation of this extensive catalogue highly desireable. On examination, I found that the Madras Catalogues given in Vol II—IV already contained several of these stars, and several others were situated too near to the South Pole, or passed the meridian too near to the horizen to be visible; added to which the uncertainty of refraction at altitude below 15° render observations of Declination within this limit, of comparatively little worth; hence I determined to re-observe the Brisbane Catalogue with the exception of those stars situated within 28° of the South Pole, and of those whose places had, already been given in the former Volumes of the Madras Observations. The Catalogue thus selected was a formidable one (containing above 5000 stars), which, as it was my intention to bestow two years only on its observation, it was evident could not be readily accomplished, I therefore struck out several stars of the 8th and 8.9 Magnitude, and began to observe in the first instance always the brighter stars: the result of these alterations have eventally reduced the Catalogue to its present extent (3455 Stars).

It had been my intention, to make three observations of each star, a plan which has on the whole been pretty nearly accomplished, but the unusual extent of cloudy weather during the months June—November, has rendered the Catalogue in the hours XVI and XVII less complete than I could have hoped for. In the column "No obs", is exhibited the number of observations made at the Circle as well as at the Transit Instrument—the observations having in each case been made simultaneously at either instrument. As this circumstance is perhaps new, I may as well mention now it was effected, thus; the Transit Observer in the act of setting the instrument; repeated aloud the N. P. D. of the Star he was about to observe, and the exclamation, "entering the field" "near the first wire" &c—or if three or four stars were visible—"North proceeding" or "South following" &c—rendered it next to imposible but that the same star should be observed at both Instruments.

The names have been principally derived from a Cary's celestial globe, and express in most cases, simply the constellation in which the star occurs.

The magnitudos, are the mean of the estimations from both Instruments: in a generaly way they exhibit numbers agreeing pretty well with those set down in the Brisbane Catalogue, down to 30° c

#### 2 On the Reduction of the Observations of the fixed Stars in 1838 & 1839.

altitude, below which, the magnitudes observed at Madras are smaller (as might be expected) than those observed at Paramatta.

The reductions have been effected as heretofore, by the values A, B, C, D, as furnished in the Nautical almanaes, in conjuction with those of a, b, c, d, &c which are here given: these latter values have been computed for the year IS45 by applying 20 times the amount of annual variation to the place for 1825 as given in the Brisbane catalogue: the formulae employed are as follow.

$$a=+\cos\alpha$$
, sec  $\delta$   $a'=+\tan\omega$ ,  $\cos\delta$ ,  $-\sin\alpha\sin\delta$   $b=+\sin\alpha$ , sec  $\delta$   $b'=+\cos\alpha$ ,  $\sin\delta$   $c=+46''$ ,  $025+20''$ ,  $041\sin\alpha$ ,  $\tan\delta$   $c'=+20''$ ,  $041$ ,  $\cos\alpha$   $d'=-\sin\alpha$ 

The table of refractions employed, is that given by Mr. Atkinson in the III Vol of the Royal Astronomical Society's Memoirs: I have already explained, that my choice in this respect, was decided on comparing the observations of stars at low altitudes at Greenwich as reduced by employing the tables of Ivory, Young, Brinkley, Bradley and Groombridge; when, the table by Mr Atkinson gave results more accordant than either of the above.

Accompanying the Greenwich observations for 1836 is a table of refractions from formulae furnished by Professor Bessel, which of course would not have been selected by the Astronomer Royal in preference to all others, had they not on a theoretical or practical examination evinced their claims to superior merit; be this as it may, I have thought it would not be amiss here to shew, how nearly the refractions computed from the formulae of Bessel or Atkinson agree; thus, if B. represent the refraction computed under any circumstances from Bessel's formulae, and A, that derived from Atkinson, we get as follows.

Barometer 29,60 Inches.

		Fahrenhei	t Thermom	eter.	
Z.D.	<i>5</i> 0°	600	700.	800	900
	в.—А.	B.—A.	ВА.	BA.	В.—А.
10 20 30 40 50 60 65	$\begin{array}{c} 7 \\ -0.03 \\ -0.06 \\ -0.09 \\ -0.15 \\ -0.20 \\ -0.33 \\ -0.44 \end{array}$	- 0,00 - 0,01 - 0,01 - 0,00 - 0,02 - 0,05 - 0,14	+ 0,03 + 0,08 + 0,11 + 0,14 + 0,21 + 0,27 + 0,32	$ \begin{array}{c} 7 \\ + 0.07 \\ + 0.14 \\ + 0.22 \\ + 0.31 \\ + 0.45 \\ + 0.61 \\ + 0.73 \end{array} $	+ 0,14 + 0,21 + 0,33 + 0,48 + 0,68 + 0,95 + 1,14
70 75 80	$\begin{array}{c c} - 0,56 \\ - 0,84 \\ - 1,31 \end{array}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	+ 0,34 + 0,32 + 0,16	+ 0,86 + 0,97 + 1,02	+ 1,37 + 1.65 + 1,90

Barometer 30,00 Inches.

		Fahrenl	neit Thermo	ometer.	
Z. D.	50º	60º	700	800	. 900
	В.—Л.	В.—Л.	В.—А.	В.—А.	В.—А.
0	# .	4.	H	"	7
10	0,03	<b> 0,0</b> 1	+ 0,04	+ 0,07	+ 0,10
20	- 0,06	0,02	+ 0,07	+ 0.14	+0.21
30	0,10	- 0,03	+ 0,11	+ 0,22	+ 0,34
40	0,1 <i>5</i>	— 0,05 <sub>1</sub>	+ 0,17	+ 0,31	+ 0,48
50	- 0,21	<b> 0,0</b> 7	+ 0,24	+ 0,45	+ 0,69
60	0,32	- 0,12	+ 0.31	+ 0,61	+ 0,96
65	- 0,42	<b> 0,18</b>	+ 0,37	+ 0,74	+ 1,16
70	<b>—</b> 0,56	<b>—</b> 0,27	+ 0,37	+ 0.86	+1,39
76	<b>—</b> 0,85	0,49	+ 0,38	+ 0.98	+1,67
80	— 1,31: 	0,60	+ 0,27	+ 1,04	+ 1,94

Here we perceive that the difference between the two tables is independent of the Barometer, and is dependent perhaps altogether upon the Thermometer; inasmuch as, at a temperature of 65° Fahrenheit it matters not which table of refractions be employed. Now the Madras observations, having been directed to the observation of a numerous catalogue of Stars, it necessarily follows, that fow stars have been frequently observed, whereby we could compare observations at extreme temperatures; indeed, on examination, I find that one star only (Polaris S. P.) has been observed under different temperatures, a sufficient number of times to render a result at all worthy of notice, thus,

Polaris (Sub Polo.)

At Temperatures not exceeding 75°

· · · · · · · · · · · · · · · · · · ·	Barom.	The In		Observed N. P. D.	Aber, and Precession.	Index Error.	Declination Jan 1, 1836. uncor for ref.
1833 Dec. 30	30,122		71,0	358 31 30,8	+ 26,46	-1.26,89	88 30 29,37
1834 Jan. 1	102	75,0 71,0	72,0 68,0	31 29,4 31 36,3	$+25,30 \\ +25,14$	-129,35 $-128,61$	2 <i>5</i> ,3 <i>5</i> 32,8 <b>3</b>
1835 Dec. 26 27	130 138	69,2 70,8	67,9 65,8	32 57,0 33 0,0	-15,38 $-15,51$	-210,31 $-210,31$	31,31
20 30	104 162	69,8 70,8	67,9 67,3	32 <i>5</i> 7,1 32 <i>5</i> 9,1	- 15,73 - 15,85	<b>2</b> 10,28	31,09
1836 Jan. 1	100	73,0	67,9	32 58,8	<b>— 16,68</b>	$\begin{array}{c c} - 2,10,28 \\ - 2,11,26 \end{array}$	32,97 30,86
2 24	110	74,0 69,9	72,6 64,7	32 56,2 33 1,3	-16,17 $-16,50$	-211,26 $-29,10$	28,77 36,61
1837 Jan. 6	30.020 29,080	72,2 70,4	72,0 66,2	31 <i>58</i> ,4 31 <i>5</i> 1,2	-37,91 $-38,13$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	34,49 29,00
23 24	906	73,2	68,2 71,0	31 49,9 31 49,2	97,93 37,88	-044,02 $-043,70$	27,05 27,63
Feb. 26 1838 Dec. 20	860 30,116	74,4 73,8	71,2 72,0	31 42,7 30 39,3	-32,75 $-119,27$	$\begin{array}{c c} - & 0 & 41,17 \\ + & 1 & 3,78 \end{array}$	28,78 23,81
		[				, .	30,28
	30,061	1 72,2 ]	09;2	Mean of	16 observation	008.	

And further we have,

## 4 On the Reductions of the Observations of the fixed Stars in 1838 & 1839.

Polaris (Sub Polo.)
At Temperatures above 75° and below 85°

ī		<u> </u>	¬									Declin	nation !
i		- 1	Barom.		rm.		beer		Aber and	Index	error.		. 1836.
Í		- 1		In	Out	N	f. <b>P.</b>	ք. ի	Precession.	2 jidon	0,101,	uncor.	for ref.
<u>'</u>		<del></del> -	·		<del> '</del> i	-	0	"	4	<del> , .</del>	N		/ //
1831	Feb.	20	30,000 }	80,7	79,8	358	30	46,4	+126,00	_ 1	47,46	4	24,94
100%	Apr.	20	29,930	83,5	82,1			45,5	42,98	i	5,00	1 00 00	
		22	870	83,3	83,1		ي بد	40,8	43,56	l i	5,00	1	23,48 19,36
		23	940	84,0	83,9			41,1	43,84	1 1	4,38	ļ	
		24	937	83,5	84,1			41,5	44,12		4,38		20,56
		25	917	83,2	83,9			40,0	44,40		3,80		21,24
		26	850	83,0	84,7			38,7	44,68		3,80	i	20,60
		27	830	34,8	84.0			37,8	44,95		0,89	1	19,58 21,66
l F		30	788	84,7	85.8			38,2	45,76		0,89		23,07
	May.		865	84,5	84,8			31,5	47,65	۸	57,37	1	21,78
	wing.	18	826	84.0	85,0			12,3	49,68		43,82	1	
1833	Мат.		30,016	81,0	78,0		30	34,4	+118,67		28,36	1	18,06 24,71
1000	4124431	31	012	80,1	76,5			33,3	18,97	٦	28,57		23,70
	Apr.	ĭil	032	78,2	75,1			34,9	19,27		28,13	1	26,04
	**Pri	2	042	78,9	77,2		02	32,0	19,57	1	28,13	1	23,44
ļ		4	29,982	80,4	77,9	i '		31,2	20,19	ì	27,61	1	23,78
1		5	952	79,0	78,0			28,5	20,50	1	27,61		21,30
1		в	952	80,2	70,4	· .		28,5	20,81		27,61	ł	21,70
t	1	7.	928	81,2	80,5			25,6	21,12		27,61		19,11
1	'	10	30,114	81,5	79,5	l		32.1	22,08	1	27,61 27,61		26,57
1833	Jan.	Ĝ	714	76,2	75,2	ĺ		47.2	44.57	3		i	27,21
LOOK	VAU.	10	182	76,2	73,9			49.8	44,37	. 3	4,56	ľ	
1	Apr.	18	20,980	84,1	83,0		30	49,9	1 5,14	,	33;24	i	29,61 21,80
1	Nov.	28	30,130	79.6	80,0		31	14,6	0 31,62	1.	24.30	1	21,92
Į	Dec.	ĩ	150	77,0	77,5.		01	18,3	30,93	1	24,30		
1	D00,	2	107	76,4	76,3	1		19,5	30,66	i	24,30		24,08 25,8 <i>5</i>
Į .		4	062	79,3	70,0	Į.		20.6	30,12	ì	24,85		25,87
1		5	060	80,2	80,0	(		19,1		1			24,12
ļ		8	060	80,2	80,0	1		19,2	29,87 20,62		24,85 $25,52$	T I	23,30
1		8	100	78,2	77,5			23,7	29,14			1	
		9	100	78,2			:	23,6		1	26,57		26,27 25,61
1		10	060	76,1				25,3		1	26,00 27,75		26,24
•		11	056	75.8				25,0				1 .	
1		12	038	76.7				24,7			27,75 $27,75$	ļ	25,73 25,23
1		18	048	78.4				23,1	27,15				24,30
1.5	7	24	050	70.4				30,8			25,86 27,98		29,04
	1.0	25	050	77,3				29,1	26,08		27,98		27,20
1		26	002	76,9				30,4			27,08		28,36
199.	Jan.	. 5	30,032	76,8			. :	32,6	25,04			}	28,72
1,00	T Day.	13	044	77,1			٠, ١٠	30,3	24,77	4	28,92 29,90	1: .	25,17
1 .		14	066	77,8				34,0			30,40	1	28,36
1 1836	A Ane		20.080										19,03
1.50	Apr.	26	29,962 988	83,4	82;(     20:3	<b>;</b> ]		2 15,6	+ 5,15	2			19,86
1 (2)	1	27	30,020		82,3   81,5			15,9 15,8	5,68 5,95	,	1,72 1,72	1	20,03
		28	29,970	83,8	81,7				. 801				18,59
1:11:4	36.	29	946				1	14,1	6,21		1,72		19,98
l .		30	916	84,0				15,2			1,72		19,78
	May.	1	966	84,0				14,8	6,71	,	1,72		20,44
		. 1, 1, 1	800	84,0	81,6	<b>'</b>		15,7	6,96		1,72		20,4
	4.4	114	30,007	70	79,0		٠.		ا خد خدم			•	19,49
<u> </u>	1 19 11		ון טַטּיָטין	1 / 5 , 3	1 1 1 2 1	4.1	سرد الأعد	Die	in of 48 obse	ryations	k .		10,40

And further we have

Polaris (Sub Polo.)

At Temperatures above 85°

		Barm.	Ther In	m. Out		bser P.			r. ann. ession.	Index	error	Declination Jan. 1, 1836, uncor. for ref	1
			<u>-</u>	¦		, ,	<del></del>	<del></del> ;	<del>,</del> -	,	- <del></del>	0 / #	-i
1000 4	١۵٥	29,804	85,2	85,9	358		38,9	+ 1	45,42	1	0,89	88 30 23,4	3
1833 April :	4	750	86,6	86,6	JUU	وون	37,1	, .	46,66	î	10,0	23,7	
May	5	826	86,2	86,2			34,1		46,90	î	0,01		
	9	803	86,0	85 0			28,5		47,86	Ô	57,37		
	14	843	86.5	85,0			27,5		48,90	ő	56,95	1	
	15	830	85.3	85.0			27,7		49,10	ŏ	56,95		
	16	890	86.3	84.7			15,2		49.30	0	45,55		5
	20	804	89,0	89.0			13,9		50,10	0	43,82	20,1	8
	21	812	89,2	88,0	]		8,3		50.29	0	43,82	14,7	
	23	777	91,3	90.0	i		6,0		50.62	0	41,51	15,1	
Ì	24	790	90.2	88,8	Ì		7,9		50,82	0	41,51	17,2	1)
	25	800	89.7	88,2			0,2	Ì	51,00	0	39,36	17,8	
l I	26	820	80,7	89,9	ļ		6,2		61,16	0	39,36	17,9	
}	28	760	80.7	89,7	1		36,1		<i>5</i> 1,39	] ]	10,41	17,0	
June	3	668	91.2	92,8	1		37,4	1	52,17	1	11,25	18,3	
	30	750	85,7	87.4	1		37,8		63, 16	] ]	9,71		
1835 June	28	830	89.6	89,7	ļ		5,6	ļ	35,05	2	22,38	18,2	
l	29)	840	87,0	85,0	1		4,8		35,02	2	24,91		
July	1	854	81,0	86,0	l l		0,9		34,93	2	22,82	22,0	11
1830 May	5	926	86,0	84,0	ł		9,8	1	7,92	2	0,88		34
ĺ	8	902	90,0	87,5	l		10,9		8,63	~ 2	0,88		
ł.	9	874	92,0	87.8			11,5	1	8,84	2	2,27		
1	11	808	8,10	87,3			11,6		9,28	2	2,27		
	15	884	89,1	85,0			9,4		10,08	2	2,21		
	16	022	88,0	85,2			9,9	ŀ	10,28	2	2,21	17,0	
	18	908	88,7	87,6			0,2	Į .	10.66	2	1,06		30
	20	908	89,4	87,9			7,9	f	11,00	2	1,76	17,	ιö
ļ	22	930	87,6	85,9			10,6	i	11,34	2	1,86	20,0	
	23	038	88,5	87,0			9,0	l	11.50		1,80	18,0	
June	17	8.50	88,7	87,8			1,4	ì	13,83	] 1	<i>6</i> 9.19		_
	18,	810	88,8	87,3	1		0,2	1	13,85	1	60,20	D	8د,
		20,836	88,2	87,2						}		18.	49

Puting r, r'. r'' to represent the refractions which in these three cases apply, and taking the means, we get as follows.

:	Thermometer			
Burometer	In out		No obs.	Declination of Polaris
			2.0	January 1 1836
Inches	0 0			0 / 11
30,061	72,2 69,2	1 .	16	88 30 30,28 + r
30,007	79,9 79,0	t .	48	23.42 + r'
29,836	88,2 87,2		31	18.49 + r''

If we now compute the values of r r' &c. from the tables given by Atkinson and Bessel we get  $a_1$  follows.

	employing Then	MOMETER IN	employing Therem	OMETER OUT
	ATKINSON	Brssel.	ATKINSON	Вказег
9'	-4 24,92	<b>4</b> 25,38	-4 26,76	-4 27,00
<i>"</i>	19,80	20,87	20,34	21,34
r''	13,38	15,18	13,97	15,67

#### 6 On the Reduction of the Observations of the fixed Stars in 1838 & 1839.

whence we get as follows-

	FROM OBSERVATION	ATKINS	ON	Визвит	ւ
	•	Thermon	ieter	Thermon	iete r
		IN	$\mathbf{OUT}$	IN	OUT
r -r'	<b>6</b> ″,86	. 5",12	6'', 42	$4^{n},5$ l	5" <b>,</b> 66
r - r''	II ,79	11,54	12 ,79	10 ,20	11 ,33 .
5º p#	4 ,93	6,42	6 ,37	5,69	5 ,67

If we now subtract the tabular values of r-r'' &c. from those observed, we get

	ATKINSON'S errors	TABLES. squared	sum	errors n	Bessel's Tables squared	sum
Thermometer	in $\left\{ \begin{array}{l} 1,74\\ 0,25\\ 1,49 \end{array} \right.$	3,0276 0,0625 2,2201	5,310	2,35 1,69 0,76	$\left. egin{array}{c} 5,5225 \\ 2,5281 \\ 0,5776 \end{array} \right\}$	8,628
Thormometer o	$ut \left\{ \begin{array}{l} 0,44 \\ 1,00 \\ 1,44 \end{array} \right.$	0,1936 1,0000 2,0736	3,267	1,20 0,44 0,74	$\begin{bmatrix} 1,4400 \\ 0,1936 \\ 0,5476 \end{bmatrix}$	2,181

Exhibiting—as far as the correction for temperature is concerned, that Bessel's refraction (Thermometer Our) better satisfies observations at low altitudes and high temperatures than does Atkinson's and, that when Atkinson's table is employed, the out door Thermometer should be used.

If we now apply the above values for r, r' &c. to the unreduced places, we obtain.

							n of Polaris. 1836.
Employing	Atkinson's	tables -	- Thermometer in	+	88	. 26	4,41
			out				3,63
	Bessel's	*******	in	· 🛶 .			3,19
			out			-	2,53
of police	From	the Green	wich Observations	1			4,60

In which point of view Atkinson's refractions—Thermometer In (as I have always employed) appears to claim a preference; be this as it may, I hope to have shown, that, if not the best—at least a very accurate table of refractions has been employed.

The errors of the clock for the A. R., and the Index Errors for the Declination, have been computed as heretofore, with reference to the places of known stars given in Vol. II.

The computations, have for the most part been performed in duplicate, (those for the values of a, b, c, d, have been strictly so); and the remainder have undergone a strict examination previously to being trusted, with which precautions, the errors are I apprehend very few in number and of trifling amount.

## SUBSIDIARY CATALOGUE

OF

# THE FIXED STARS

IN THE

# SOUTHERN HEMISPHERE

REDUCED TO JANUARY 1, 1840,

together with the annual precessions, and Logarithmic values of a, b, c, d computed for 1845.

&c.

NT.	'A.T		No.	Right Ascen.	Annual		Logarit	hms of	
No.	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	а	<i>b</i>	c	d
1 2 3 4 5	Phænicis.  O App. Sculp. Phænicis. Tucanæ.	7 7.8 6 7 7.8	3 3 3 3	H. M. s. 0 0 56,89 1 50,68 3 35,60 3 52,75 4 5,40	+3,059 3,056 3,052 3,044 3,024	+9,0639 8,9785 8,9169 8,9599 9,1169	6,7829 6,9336 7,1355 7,2161 7,3868	+0,4856 ,4851 ,4846 ,4834 ,4806	8,9765 8,83 <b>20</b> 8,6851 8,7940 9,0517
6 7 8 9 10	Phonicis.  App. Sculp.	7 8 7 7	3 3 2 3	5 44,88 5 54,53 6 53,25 8 38,80 10 17,09	3,028 3,011 3,039 3,034 3,022	+9,0117 9,0979 8,9146 8,9027 8,9223	+7,4249 ,5255 ,4036 ,4905 ,6822	+0,4812 ,4787 ,4827 ,4820 ,4803	8,8930 9,0257 8,6812 8,6452 8,7037
11 12 13 14 15	App. Sculp.  Phœnicis.  App. Sculp.	7.8 7 7 6 6.7	555555	12 56,33 15 12,09 16 48,67 19 59,27 20 32,71	3,004 3,013 2,942 2,990 2,964	+8,9396 8,8940 9,0324 8,9030 8,9428	+7,6982 ,7220 ,9035 ,8493 ,9005	+0,4777 ,4790 ,4686 ,4757 ,4719	-8,7485 ,6170 ,9283 ,6490 ,7577
16 17 18 19 20	Phænicis. App. Sculp.	7.8 6.7. 7.8 7 8.9	2 4 3 3 3	20 34,40 20 57,86 21 22,82 21 32,41 22 7,28	2,916 2,914 2,910 2,956 2,957	+9,0278 9,0268 9,0275 8,9476 8,9462	-+7,9869 7,9928 8,003 l 7,9269 7,9244	+0,4648 ,4645 ,4639 ,4707 ,4708	8,9213 ,9196 ,9209 ,7690 ,7657
21 22 23 24 25	App. Sculp. Phonicis. App. Sculp. Phonicis.	7 7 6 7 7	3 3 3 3	22 38,17 22 40,79 25 46,02 25 53,02 25 59,41	2,957 2,917 2,980 2,957 2,841	+8,9399 9,0055 8,8654 8,9121 9,0756	+7,9327 8,0058 7,9486 7,9766 8,1345	+0,4708 ,4649 ,4742 ,4708 ,4535	—8,7513 ,8837 ,5898 ,6796 ,9951
26 27 28 29 30	App. Sculp.	7 6 8 7 6.7	3 3 3 3 3	26 33,31 26 50,20 26 50,96 28 2,69 28 4,41	2,921 2,858 2,939 2,880 2,827	+8,9588 9,0436 8,9294 9,0024 9,0693	+8,0288 ,1168 ,0101 ,0946 ,1626	-1-0,4655 ,4561 ,4682 ,4594 ,4513	8,7949 ,9472 ,7268 ,8791 ,9862
31 32 33 34 35	App. Sculp.	7.8 7 7.8 7.8	- 3 3	29 50,45 30 32 14,01 33 13,50 34 19,37	2,817 2,872 2,875 2,897 2,874	+9,0643 8,9903 8,9750 8,9440 8,9619	- -8,1837 ,1231 ,1292 ,111 <i>6</i> ,1433	+0,4601 ,4682 ,4586 ,4619 ,4585	8,9790 ,8579 ,8294 ,7643 ,8035
36 37 38 39 40	3	7.8 6.7 6 8 7	3 3 3 3 3	37 0,43 37 22,93 37 37,54 37 52,94 38 14,73	2,863 2,861 2,760 2,808 2,817	+8,9572 8,9576 9,0547 9,0070 8,9957	+ 8,1714 ,1765 ,2760 ,2314 ,2239		8,7972 ,7955 ,9658 ,8892 ,8694
4: 4: 4: 4: 4:	3	9.10 7 7 6 8	3 3 3 3 3	39 27,63 41 31,08 42 33,52 43 23,67 46 22,62	2,765 2,804 2,827 2,747 2,894	+9,0365 8,9874 8,9611 9,0251 8,8920	-+8,2790 ,2518 ,2367 ,3090 ,2107	+0,4417 ,4478 ,4513 ,4389 ,4615	-8,9380 ,8554 ,8047 ,9206 ,6302

,,	Declination	Annual		Logarit	hma of		Diffe		he Brisbane scension	Catalogue.
No.	(South) Jan. 1. 1840.	Precession	a'	<i>b</i> ′	c'	ď'	No.		om   M. C.	Declin.
1 2 3 4 5	44 53 40,37 45 33 30,06 36 1 44,71 43 3 33,35 59 24 31,30	+20,042 20,040 20,037 20,037 20,037	+9,4048 ,4914 ,5575 ,5185 ,3747	→9,9126 ,8535 ,7692 ,8340 ,9347	+1,3019 ,3019 ,3019 ,3018 ,3018	7,7190 7,9551 8,2196 8, <b>2</b> 661 8,2699	1 4 8 9 10	5. - 2,37 - 0,47 - 3,08 - 2,23	8. - 3,93 	" - 0,92 - 2,81 - 0,05 + 9,73 - 3,35
6 7 8 9	49 34 25,20 57 53 26,98 35 47 39,63 33 34 27,66 37 22 52,84	20,034 20,034 20,032 20,027 20,021	+9,4786 ,4031 ,5682 ,5832 ,5717	9,8812 ,9276 ,7666 ,7421 ,7810	+1,3018 ,3018 ,3017 ,3016 ,3015	8,4131 ,4275 ,4890 ,5875 ,6595	13 14 17 21 24	- 1,83 2,50 2,11 0,86 2,63	- 3,27 - 3,28 - 3,15 - 3,05	- 4,99 +12,56 7,09 + 9,35
11 12 13 14 15	40 7 41,18 31 55 23,81 51 55 8,85 33 53 24,06 40 47 57,39	20,007 19,995 19,979 19,967 19,958	+9,5670 ,6053 ,5132 ,6117 ,5888	—9,8083 ,7220 ,8947 ,7444 ,8131	+1,3012 ,3009 ,3006 ,3002 ,3001	—8,7579 ,8270 ,8699 ,9446 ,9559	27 34 35 45 46	- 2,40 2,35 3,99 0,09 4,24		- 7,26 - 1,68 - 4,68 + 0,54 + 1,07
16 17 18 19 20	51 30 40,10 51 25 4,78 51 29 23,44 41 32 59,76 41 20 50,06	19,958 19,957 19,953 19,951 19,951	+9,6315 ,6340 ,6366 ,6877 ,5888	-9,8916 ,8910 ,8014 ,8194 ,8176	+1,3001 ,3001 ,2999 ,3000 ,5000	—8,9573 ,9642 ,9736 ,9763 ,9763	47 49 51 52 53	+ 1,68 - 3,05 + 1,20 - 3,49	-38,25	+ 0,77 + 0,82 + 6,82 + 2,02
21 22 23 24 25	40 24 2,58 49 5 43,30 30 26 27,39 35 51 45,70 55 12 42,86	19,945 19,945 19,913 19,908 19,911	+9,5965 ,5527 ,6345 ,6222 ,5263	-9,8093 ,8761 ,7016 ,7646 ,9167	+ 1,2098 ,2998 ,2991 ,2990 ,2991	8,9983 8,9983 9,0527 9,0615 9,0561	55 56 62 63 64	- 4,07	3,64	- 2,67 + 4,51 - 1,73 - 9,92 - 1,67
26 27 28 29 30	43 18 53,12 53 15 25,26 38 52 43,75 48 52 38,72 55 42 7,91	19,904 19,903 19,897 19,890 19,889	+9,5977 ,5490 ,6159 ,6775 ,5403.	9,8331 ,9006 ,7943 ,8735 ,9135	+1,2959 ,2989 ,2988 ,2986 ,2986	-9,0670 ,0702 ,0776 ,0890 ,0900	05 67 68 69 70	+ 0,02 - 3,27 - 2,78	3,27	+ 4,36 + 7,66 + 4,57 - 2,40
31 32 33 34 35	55 16 32,35 47 32 45 40 37,50 41 24 37,03 44 0 8,85	19,869 19,859 19,841 19,827 19,814	+9,5490 ,5933 ,6064 ,6253 ,6191	—9,9109 ,8637 ,8500 ,8156 ,8367	+ 1,2987 ,2979 ,2975 ,2973 ,2970	9,1757 ,1289 ,1498 ,1629 ,1764	77 78 79 82 86	- 2,29 - 1,10 + 2,00		$ \begin{array}{r} -5.54 \\ -1.30 \\ +4.86 \\ +2.45 \end{array} $
36 37 38 39 40	43 28 30,99 43 32 52,68 54 35 31,44 49 42 47,60 48 25 50,52	19,777 19,772 19,769 19,765 19,760	+9,6294 ,6304 ,5866 ,6096 ,6159	-9,8317 ,8321 ,9051 ,8762 ,8676	+1,2962 ,2960 ,2960 ,2959 ,2958	9,2084 ,2130 ,2153 ,2184 ,2221	95 96 97 99 100	- 2,34 - 2,43 - 3,29 - 1,82		+ 3,15 + 0,89 - 1,46 + 4,34 + 2,91
41 42 43 44 45	52 52 44,54 47 34 18,43 44 16 3,55 51 51 39,08 33 12 13,68	19,744 19,711 19,694 19,680 19,620	+9,6100 ,6294 ,6434 ,6191 ,6767	-9,8950 ,8608 ,8360 ,8877 ,7290	+1,2954 ,2947 ,2943 ,2940 ,2927	-9,2361 ,2672 ,2681 ,2760 ,3095	103 106 107 109 117	$-\frac{2,49}{-26,41}$	- 3,04 - 2,62 - 2,71	+12,56 $-0,78$ $+0,44$ $-0,88$ $-1,21$

No.	Nr	34	No.	Right Ascen.	Annual		Logarith	ims of	
NO.	Names.	Mag.	Obs.		Precesu.	a	<i>b</i>	c	$\overline{d}$
46 47 48 40 50	Phænicis. Electri. App. Sculp. Phænicis.	7 7.8 7 6 6.7	3 3 3 3 3	H. M. 8. 0 48 47,18 53 32,43 54 6,30 54 47,79 55 15,40	+ 2,677 2,576 2,814 2,867 2,569	+9,0450 9,0849 8,9214 8,8847 9,0848	+8,3817 ,4624 ,8040 ,2733 ,4773	+0,4276 ,4109 ,4493 ,4674 ,4081	8,9632 9,0122 8,7208 8,6135 9,0125
51 52 53 54 55	Electri. Phonicis. n Electri. phonicis.	6.7 7.8 7 7.8 6	3 3 3 3 3	55 39,36 56 18,75 58 56,59 1 0 11,47 0 29,02	2,879 2,720 2,816 2,740 2,740	+8,8749 8,9791 8,9040 8,9415 8,9305	+8,2706 ,3737 ,3255 ,3721 ,3741	+0,4592 ,4346 ,4496 ,4392 ,4392	8,5784 8,8448 8,6782 8,7717 8,7677
57 57 58 59 60	Phonicis.  Pleotri. App. Soulp.	7.8 7 7.8 7	3 4 3 3	2 42,12 3 35,29 3 41,36 4 49,69 5 20,75	2,602 2,473 2,487 2,840 2,794	+9,0762 9,0892 9,0788 8,8762 8,8982	+8,5250 ,5419 ,5353 ,3375 ,3660	+0,3983 ,3932 ,8957 ,4533 ,4462	9,0018 9,0201 9,0057 8,6958 8,6677
61 62 63 64 65	Phænicis. Electri. Phænicis.	6 6 9 7.8	3 3 3 3 1	5 22,92 7 57,54 8 41,31 10 3,15 11 38,65	2,767 2,658 2,793 2,752 2,668	+8,9134 ,9656 ,8906 ,9072 ,9464	+8,3821 ,4518 ,3790 ,4072 ,4569	+0,4420 ,4245 ,4461 ,4393 ,4262	8,7095 ,8255 ,648′ ,697
66 67 68 69 70	Electri. Phonicis. 7 Electri. Phonicis.	7 7 7 6.7 7	3 3 3 3	15 25,52 16 4,18	2,732 2,645 2,737 2,800 2,676	+8,9026 ,9461 ,8998 ,8698 ,9264	+8,4359 ,4790 ,4343 ,4044 ,4679	+0,4369 ,4224 ,4373 ,4472 ,4275	8,690 ,791 ,683 ,590 ,750
71 72 73 74 75	Fornacis. Phomicis.  Electri.	7 7 7.8 7 7	3 3 3 3 2	17 44,73 20 44,20 22 50,60	2,617 2,387 2,826	9,0474	+8,4166 ,5001 ,6136 ,4254 ,4455	+0,4453 ,4178 ,3778 ,4512 ,3544	8,60 <i>5</i> ,803 ,965 ,502 9,018
76 77 78 79 80	Phonicis.  App. Soulp.	7 7.8 6.7 6.7	3	24 42,26 24 51,23 25 46,57	2,477 2,659 2,688	8941	+8,4482 ,5808 ,5447 ,4894 ,5858	+0,4437 ,3939 ,4081 ,4294 ,3930	8,573 ,880 ,814 ,680 ,876
81 82 83 84 84	Electri. Phænicis. Eridani.	7 7 7 7	333	27 32,73 27 33,90 28 11,30	2,542 2,270	8,8661 8,9533 9,0642	+8,5530 ,4711 ,5583 ,6724 ,6866	+0,4062 ,4390 ,4052 ,3560 ,3477	8,815 8,598 8,813 8,991 9,010
86 87 88 89	Phonicia, Electri, Eridani,	7 7 7 6.1	] 8	30 15,44 30 28,13 30 53,02	2,465 2,654 2,206	8,8983 9,0777	+8,4671 ,5966 ,5174 ,7003 ,5126	+0,4422 ,3918 ,4239 ,3436 ,4270	8,564 8,859 8,690 9,011 8,670

	Declination.	Annual	<del></del>	Logari	tlims of		Diffe	rence from th		Catalogue.
No.	(South.) Jan. 1. 1840.	Precession	a'	<i>b'</i>	c'	d'	No.	Right As   froi   T.	M.C.	Declin.
46 47 48 49 50	54 3 26,17 57 47 32,36 39 4 22,56 32 24 52,86 57 51 50,94	+ 19,585 19,494 19,482 19,467 19,467	+9,6304 ,6304 ,6857 ,6987 ,6375	-9,8981 ,9153 ,7870 ,7161 ,0148	+1,2919 ,2899 ,2896 ,2893 ,2891	—9,3267 ,3655 ,3703 ,3760 ,3796	121 130 132 133 136	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{c c}  & s. \\  & 2,77 \\ \hline  & 2,89 \\ \hline  & 4,39 \end{array} $	+ 2,12 + 3,51 + 0,66 + 3,27 + 4,56
51 52 53 54 55	30 23 11,90 45 6 14,35 36 31 2,97 42 35 59,44 42 20 37,10	19,449 19,451 19,378 19,351 19,338	+9,6964 ,6739 ,6998 ,6955 ,6972	-9,6905 ,8528 ,7596 ,8150 ,8127	+1,2889 ,2889 ,2873 ,2867 ,2864	9,3827 ,3816 ,4068 ,4153 ,4191	138 137 144 149 153		- 3,16 - 3,39 - 3,86 +11,81	- 7,50 + 0,61 - 0,25 - 3,18
56 57 58 59 60	57 26 54,83 58 32 31,60 57 42 44,93 31 39 1,22 36 3 21,97	19,293 19,280 19,267 19,252 19,229	+0,6646 ,6628 ,6665 ,7126 ,7135	—9,9091 ,9140 ,9098 ,7021 ,7516	+1,2854 ,2851 ,2848 ,2845 ,2839	—9,4623 ,4369 ,4305 ,4438 ,4499	158 162 163 166 167	$ \begin{array}{r} -4,40 \\ -2,57 \\ -31,74 \end{array} $	- 3,38 - 4,55	- 0,16 + 2,23 + 1,31 - 1,99 + 0,53
61 62 63 64 65	38 42 17,49 46 23 14,58 34 59 45,91 38 6 50,10 44 10 93,47	19,226 19,162 19,153 19,108 19,066	+9,7118 ,7084 ,7193 ,7226 ,7210	-9,7779 ,8401 ,7384 ,7694 ,8213	+1,2839 ,2824 ,2822 ,2812 ,2802	-9,4507 ,4668 ,4688 ,4793 ,4888	168 172 174 177 181	4,06 2,51	- 3,32 - 2,91 - 2,64	+ 6,34 + 3,91 -63,93 + 2,50 + 3,28
66 67 68 69 70	37 53 22,52 44 26 33,53 37 26 1,43 31 46 51,24 41 47 20,15	18,967 18,967 18,961 18,043 18,928	+9,7332 ,7292 ,7340 ,7316 ,7348	9,7641 ,8211 ,7594 ,6966 ,7987	+1,2780 ,2780 ,2778 ,2774 ,2771	9,5003 ,5090 ,5104 ,5141 ,5167	186 188 190 187 195	2,90		- 3,94 + 3,65 - 0,94 - 4,10 + 1,54
71 72 73 74 75	82 38 42,10 45 21 49,46 55 54 43,75 27 2 8,82 30 48 48,49	18,921 18,893 18,807 18,729 18,702	+9,7832 ,7340 ,7235 ,7396 ,7469	9,7066 ,8264 ,8904 ,6279 ,6790	+1,2760 ,2763 ,2743 ,2725 ,2719	—9,5181 ,5231 ,5385 ,5514 ,5556	192 201 208 210 214	- 2,27 - 5,17 - 1,51	2,62	- 3,70 - 2,45 - 1,92 0,00 - 7,63
76 77 78 79 80	31 6 29,58 50 43 37,37 46 24 2,98 37 41 17,68 50 32 55,17	18,697 18,682 18,677 18,647 18,640	+9,7466 ,7443 ,7497 ,7661 ,7474	-9,6826 ,8582 ,8291 ,7548 ,8560	+1,2717 ,2714 ,2713 ,2706 ,2704	-9,5569 ,5586 ,5596 ,5641 ,5650	215 217 219 220 221	+ 0,38 - 3,09 - 1,94 - 3,45	- 3,65 - 2,78°	- 3,81   - 2,01   + 3,86   - 0,74   - 2,88
81 82 83 84 85	32 42 40,53 46 30 57,21 57 49 20,50 58 57 24,79	18,630 18,590 18,590 18,571 18,569	+9,7536 ,7536 ,7559 ,7404 ,7896	-9,8291 ,6998 ,8278 ,8944 ,8952	+1,2702 ,2693 ,2693 ,2688 ,2688	-9,5666 ,5723 ,5723 ,5751 ,5754	222 224 226 226 226 229	2,57 - 2,36 - 2,06	- 3,13 - 2,28 - 4,27	- 0,15 + 1,52 + 3,54 + 4,56
86 87 88 89 90	30 43 43,24 49 37 23,23 38 57 9,14 59 5 17,41 37 20 18,53	18,653 18,504 18,604 18,483 18,468	+9,7536 ,7581 ,7627 ,7443 ,7634	-9,6745 ,8470 ,7636 ,8982 ,7471	+1,2684 ,2673 ,2673 ,2667 ,2664	-9,5776 ,5844 ,5844 ,5874 ,5892	227 233 234 235 237	- 5,69 - 3,23	2,72	+ 3,03 - 3,82 - 4,47 + 2,60 - 5,03

No.	Names.	Mag.	No.	Right Ascen.	Annual	·	Logarith	ms of	
110.	114111081	mag,	Obs.	Jan. 1, 1840.	Precesn.	a	<i>b</i>	c [	d
91 92 93 94 95	Phænicis. Eridani.	7.8 7 7 7.8 6	0000000	11. M. 8. 1 31 22,21 31 41,46 32 36,35 33 8,18 33 43,91	s, -+2,514 2,570 2,338 2,247 2,249	+8,9555 8,9290 9,0 <b>2</b> 04 <b>9,</b> 0534 9,0502	+8,6785 ,6562 ,6621 ,6875 ,6874	+0,4004 ,4099 ,3688 ,3516 ,3520	-8,8167 ,7686 ,9295 ,9780 ,9737
96 97 98 99 100	Ψ Phænicis. π App. Sculp. Phænicis. q Eridani.	7.8 6.7 6 7 6.7	000000	34 26,02 34 55,33 34 59,82 35 17,92 36 19,43	2,636 2,716 2,653 2,405 2,302	+8,8950 8,8624 8,8866 8,9845 9,0 <b>20</b> 5	-+8,5350 ,5065 ,5307 ,6304 ,6714	+0,4209 ,4339 ,4237 ,3811 ,3621	8,6931 ,6993 ,6722 ,8739 ,9312
101 102 103 104 105	Phænicis.  Phænicis.	8 6.7 6 6.7 7	4 3 3 3	38 21,42 39 49,57 40 0,36 40 30,03 40 48,79	2,360 2,356 2,282 2,547 2,624	+8,9912 8,9879 9,0151 8,9132 8,8854	+8,6526 ,6562 ,6841 ,6852 ,5570	+0,3729 ,3722 ,3583 ,4060 ,4190	8,8865 ,8819 ,9 <b>2</b> 47 ,7431 ,6721
106 107 108 109 110	Phonicis. Eridani, Phonicis,	6.7 7 6.7 8 6.7	3 3 4 2	41 28,09 42 54,64 43 54,85 44 9,89 44 41,92	2,551 2,595 2,403 2,222 2,342	+8,9115 8,8891 8,9569 9,0213 8,9776	+8,5834 ,5727 ,6455 ,7107 ,6697	\$ 0,4067 ,4141 ,3807 ,3467 ,3696	8,7393 ,6896 ,8320 ,9369 ,8679
111 112 113 114 115	Eridani. Phomicis. Eridani.	7.8 8 5.6 8.9 4	3 4 5 3	45 2,31 45 36,01 47 13,84 47 33,69 49 43,47	2,221 2,421 2,419 2,235 2,268	+9,0184 8,9454 8,9411 9,0050 8,9864	-+8,7123 ,6419 ,6445 ,7109 ,7022	+0,3465 ,3846 ,3836 ,3493 ,3556	8,9320 ,8124 ,8057 ,9130 ,886 <b>2</b>
116 117 118 119 120	Phonicis.     Arietis.  Eridani.	var. 6.7 7 7 8	2 3 4 4	50 49,32 50 53,67 52 46,15 54 17,07 59 4,95	2,374 2,254 2,510 2,868 2,264	+8,9470 8,9867 8,8943 8,7868 8,9580	+8,6678 ,7087 ,6244 ,5264 ,7162	+0,3755 ,3529 ,3997 ,4576 ,3549	8,8189 ,8864 ,7154 ,2605 ,8448
121 122 123 124 125	Horologii. Eridani Horologii, Eridani.	7 7 8 7 6	3 3 4 3 3	59 17,89 2 0 56,28 2 20,40 3 55,47 3 57,83	1,802 2,174	+9,0513 9,0107 9,0834 8,9721 8,9639	+8,8101 ,7767 ,8553 ,7512 ,7429	+0,2918 ,3172 ,2557 ,3373 ,3422	-8,9887 8,9283 9,0282 8,8714 8,8581
126 127 128 129 130	Phonicis. Horologii. Phonicis. Horologii.	7.8 8.9 7.8 10 8	4 3 3 3 3	5 5,75 5 32,21 6 13,24 6 47,52 8 26,16		+8,9245 9,0815 8,9260 9,0083 9,0285	+8,7084 ,8657 ,7137 ,7993 ,8265	+0,3647 ,2482 ,3628 ,3051 ,2849	-8,7910 9,0268 8,7930 8,9279 8,9573
131 132 133 134 135	Eridani, Fornacis, Phomicis, Eridani,	7.8 6.7 7 8 6.7	3 3	9 39,23 10 33,11 11 48,67 12 51,51 13 2,16	2,530 2,701 2,460	+8,9571 8,8452 8,7961 8,8599 8,8789	+8,7601 ,6521 ,6103 ,6768 ,6961	+0,3353 ,4031 ,4315 ,3909 ,3791	8,8512 ,6218 ,4492 ,6651 ,7092

Ī	Declination	Annual	 	Logari	thms of		Diffe		he Brisbane	Catalogue.
No.	(South) Jan. I. 1840.	Precession	a'		6'	d'	No.	] fi	om   M. C.	Declin.
91 92 93 94 95	46 53 59,71 43 44 28,57 54 15 2,78 57 15 30,53 57 0 29,45	+18,466 18,453 18,423 18,407 18,587	+9,7642 ,7664 ,7581 ,7536 ,7559	—9,8276 ,8037 ,8726 ,8877 ,8861	+1,2664 ,2660 ,2653 ,2650 ,2645	9,5895 ,5913 ,5951 ,5972 ,5998	236 238 240 241 243	5. - 4,07 - 3,33 - 2,58 - 4,61 - 4,18	$ \begin{array}{ c c c c } \hline  & s. \\  & -2,53 \\  & -3,75 \\  & -3,94 \end{array} $	+ 2,59 + 4,41 + 0,58 - 1,68 + 0,31
96 97 98 99 100	38 56 43,51 33 8 5,59 37 38 29,28 50 50 53,32 54 32 44,67	18,368 18,339 18,339 18,327 18,292	+9,7701 ,7664 ,7708 ,7694 ,7672	-9,7602 ,6990 ,7471 ,8505 ,7111	+1,2640 ,2634 ,2634 ,2631 ,2622	9,6021 ,6056 ,6056 ,6070 ,6113	245 246 247 248 249	— <del>2,36</del> — <del>3,12</del>	— 3,09 — 2,88	+ 0,27 + 1,29 0,59 + 0,15 5,13
101 102 103 104 105	51 49 33,31 51 37 3,57 54 19 36,51 42 33 43,96 37 57 35,86	18,217 18,166 18,161 18,138 18,127	-+9,7746 ,7781 ,7752 ,7832 ,7810	9,8539 ,8514 ,8668 ,7866 ,7451	- -1,2605 ,2592 ,2591 ,2586 ,2583	9,6199 ,6267 ,6262 ,6286 ,6300	251 253 254 255 257	$\begin{array}{r} -2,61 \\ -3,81 \\ -2,96 \\ -2,84 \\ -2,22 \end{array}$	$ \begin{array}{c c}  & \overline{2,97} \\  & 3,15 \\  & 2,41 \end{array} $	+ 1,31 - 1,74 + 0,33 + 3,82 - 1,42
106 107 108 109 110	42 18 5,34 39 12 42,11 48 36 47,68 55 15 33,81 50 59 69,20	18,138 18,048 18,010 18,003 17,982	+9,7832 ,7860 ,7896 ,7839 ,7903	—9,7846. ,7551 ,8286 ,8680 ,8432	4-1,2586 ,2564 ,2555 ,2553 ,2548	-9,6286 ,6382 ,6421 ,6429 ,6449	256 260 263 264 266	-59,84 - 3,24 - 3,23 - 2,41 - 2,39	- 4,49 - 3,43 - 2,20	+ 5,66 + 3,90 + 0,55 - 9,52 - 0,11
111 112 113 114 115	55 4 22,90 47 25 57,26 47 5 15,93 54 2 17,61 52 24 26,23	17,967 17,946 17,880 17,870 17,783	+9,7867 ,7938 ,7973 ,7938 ,7993	—9,8602 ,8190 ,8150 ,8582 ,8468	+1,2545 ,2540 ,2524 ,2520 ,2500	9,6465 ,6485 ,6548 ,6560 ,6639	268 269 272 273 278	+ 0,47 - 2,79 - 0,96 - 2,20 - 3,22	— 1,89 — 3,47	- 3,87 + 3,14 - 1,34 - 3,42 + 3,15
116 117 118 119 120	49 10 3,49 52 33 36,28 41 30 16,72 17 20 36,95 50 27 5,21	17,737 17,727 17,657 17,667 17,388	+9,8035 ,8021 ,8048 ,7459 ,8195	—9,8191 ,8465 ,7661 ,4465 ,8252	+1,2489 ,2487 ,2409 ,2447 ,2402	—9,6680 ,6687 ,6749 ,6824 ,6965	281 282 285 290 298	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	- 3,67 3,89 3,97 -+32,47	+ 3,25 + 4,50 - 5,21 - 7,75
121 122 123 124 125	59 6 46,01 55 50 55,83 61 44 59,68 52 29 26,82 51 36 40,88	17,382 17,308 17,250 17,176 17,176	+9,8129 ,8195 ,8182 ,8280 ,8280	-9,8716 ,8540 ,8797 ,8323 ,8272	+1,2401 ,2383 ,2368 ,2349 ,2349	9,6970 ,7024 ,7067 ,7120 ,7120	299 301 306 312 311	- 2,23 1,84 2,80 1,74 6,15		- 0,22 - 6,47 + 3,21 + 4,03 + 5,74
126 127 128 129 130	47 20 23,31 61 51 9,99 47 33 54,59 56 13 35,61 58 5 32,70	17,124 17;121 17,073 17,048 16,971	+9,8300 ,8222 ,8325 ,8312 ,8325	—9,7982 ,8769 ,7983 ,8493 ,8566	+1,2936 ,2336 ,2323 ,2317 ,2297	9,7156 ,7158 ,7191 ,7207 ,7258	313 314 316 317 319	$ \begin{array}{r} -3,69 \\ -3,05 \\ -3,12 \\ -1,34 \end{array} $	2,40	$ \begin{array}{r} + 6,69 \\ - 0,70 \\ + 6,31 \\ - 11,81 \\ + 2,06 \end{array} $
131 132 133 134 135	51 37 50,70 36 43 39,62 26 42 18,61 39 42 58,58 42 35 13,02	16,915 16,871 16,789 16,760 16,754	+9,8382 ,8267 ,8395 ,8361 ,8395	9,8205 ,7018 ,5762 ,7275 ,7524	+1,2283 ,2271 ,2250 ,2242 ,2241	-9,7294 ,7322 ,7373 ,7392 ,7394	322 325 331 333 334	- 3,13 - 2,02 - 2,26	2,16 3,30 2,71	$\begin{array}{r} -6,84 \\ +1,14 \\ +12,57 \\ -19,25 \\ +3,68 \end{array}$

	37	] ]	No.	Right Ascen.	Annual		Logarit	hms of	
No.	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	<i>b</i>	<i>c</i>	d
136 137 138 139 140	Phœnicis. Horologii,	8 8.9 6 8 7	3 3 6 3	11. M. s. 2 14 7,49 14 36,42 14 44,27 15 5,96 15 19,89	*** + 2,336 1,935 1,939 1,931 1,899	+8,8934 9,0061 9,0034 9,0053 9,0129	+8,7153 ,8296 ,8289 ,8310 ,8397	+0,3685 ,2867 ,2876 ,2858 ,2785	8,7411 ,9289 ,9253 ,9279 ,9390
141 142 143 144 145	Phœnicis. Fornacis. Eridani.	7.8 6.7 7.8 6.7 7	2 3 5 2 3	16 5,53 16 15,24 16 15,50 16 30,90 17 17,22	2,437 2,676 2,625 2,476 2,109	+8,8587 ,7948 ,8070 ,8469 ,9496	+-8,6888 ,6254 ,6376 ,6783 ,7843	+0,3869 ,4275 ,4191 ,3937 ,3241	8,6680 ,4621 ,5136 ,6389 ,8450
146 147 148 149 150	Horologii.  ——— Phænicis.  A Horologii.	9 9 8 7.8 5.6	000000	18 6,71 18 19,48 18 23,58 18 36,04 20 25,65	1,891 1,891 1,877 2,363 1,681	+9,0066 9,0065 9,0099 8,8739 9,0511	+8,8440 ,8452 ,8476 ,7140 ,8982	+0,2767 ,2767 ,2735 ,3735 ,2256	-8,9315 ,9314 ,8361 ,7066 ,9929
151 152 153 154 155	Fornacis. Pnænicis. Fornacis.	6.7 6 8 6	3 3 2 3	21 7,19 21 38,70 21 42,01 22 30,77 25 39,36	2,198 2,483 2,588 2,388 2,467	+8,9136 8,8327 8,8055 8,8568 +8,8277	+8,7639 ,6852 ,6580 ,7127 ,6961	+0,3420 ,3950 ,4130 ,3780 ,3922	-8,7876 ,6125 ,5278 ,6749 ,6083
156 157 158 159 160	Eridani.  Horologii. Fornacis.  Ilorologii.	7 8 6.7 7 7	4 3 3 3 3	26 19,49 27 59,49 28 27,66 28 42,56 29 38,86	2,226 2,140 2,044 2,426 1,456	+8,8910 8,9098 8,9339 8,8316 9,0707	-+8,7625 ,7872 ,8131 ,7118 ,9546	+0,3475 ,3304 ,3105 ,3849 ,1632	-8,7520 8,7880 8,8290 8,6251 9,0216
161 162 163 164 165	Eridani Pornacis. n Horologii. Eridani.	8  6  6,7  7  7.8	3 3 3	31 2,39 31 58,15 32 8,03 32 33,38 32 34,34	2,346 2,409 1,966 2,231 2,231	+8,8468 ,8277 ,9429 ,8730 ,8729	-I-8,7362 ,7210 ,8365 ,7684 ,7683	+0,3703 ,3818 ,2936 ,3485 ,3485	-8,6675 ,6235 ,8465 ,7255 ,7253
166 167 168 169 170	Gernacis	7 7 5.6 - :7 - 5.6	3	35 41,23 36 15,78	2,564 2,546 1,859 2,547 2,158	-1-8,7867 ,7899 ,9586 ,7843 ,8813	+8,6849 ,6900 ,8659 ,6940 ,7917	+0,4089 ,4059 ,2693 ,4060 ,3340	8,5023 ,5160 ,8731 ,5051 ,7467
171 172 173 174 175	Fornacis	7.8 6.7 6.7 7	3 3	37 7,06 37 8,13 39 3,05	2,005 2,651 1,924	+ 8,9765 ,9179 ,7593 ,9324 ,7769	+8,8885 ,8314 ,6728 ,8529 ,6979	+0,2475 ;3021 ,4234 ,2842 ,4067	-8,8999 ,8112 ,4037 ,83 <b>6</b> 1 ,4904
176 177 178 179 180	Eridani. Fornacis.	7 6.7 7 7.8	3	39 32,09 39 32,35 42	2,254 2,151 2,655	+8,8175 ,8479 ,8746 ,7682 ,8692	+8,7890 ,7707 ,7969 ,7027 ,8053	+0,3764 ,3529 ,3326 ,4074 ,3286	-8,6146 ,6856 ,7384 ,4732 ,7333

	Declination	Annual	<u> </u>	Logari	thms of		Diffe	rence from the Brisbane   Right Ascension	
No.	(South) Jan. I. 1840.	Precession	a'	b'	c'	d'	No.	from	Declin.
136	44 47 43,94	+16,699	+9,8432	-9,7685	+1,2227	9,7426	335	$\begin{vmatrix} -4,58 \\ -5,20 \\ -0,17 \\ -1,44 \end{vmatrix} - \frac{1,08}{4,84}$	- 2,89
137	56 51 10,85	16,680	,8467	,8430	,2222	,7438	336		- 9,04
138	56 40 53,02	16,657	,8470	,8415	,2216	,7451	337		- 2,55
139	56 49 59,02	16,653	,8476	,8423	,2215	,7453	339		- 4,56
140	57 31 4,58	16,641	,8470	,8453	,2212	,7461	340		- 0,82
141	40 8 43,83	16,602	+9,8407	-9,7275	+1,2201	—9,7483	342	$ \begin{array}{c cccc} -1,41 \\ -1,10 \\ -1,98 \\ -3,03 \\ -2,50 \\ -2,92 \end{array} $	- 4,13
142	27 43 20,69	16,595	,8096	,6854	,2200	,7487	343		+ 3,77
143	30 35 44,14	16,595	,8182	,6246	,2200	,7487	344		- 5,48
144	38 18 15,08	16,585	,8363	,7099	,2197	,7492	345		- 0,42
145	51 49 28,26	16,546	,8519	,8122	,2187	,7515	346		+ 1,01
146	57 16 28,85	16,514	+9,8500	9,8407	+1,2178	9,7533	347	- 8,43	$ \begin{array}{r}15,51 \\31,43 \\1,64 \\ +-1,07 \\ +-6,62 \end{array} $
147	57 16 36,41	16,510	,8519	,8406	,2177	,7535	348	16,70	
148	57 32 33,23	16,510	,8488	,8420	,2177	,7535	349	20,32	
149	42 53 7,85	16,480	,8476	,7477	,2169	,7551	350	2,01	
150	61 1 40,98	16,393	,8531	,8546	,2147	,7598	352	1,85 3,24	
151	48 25 24,18	16,352	+9,8573	9,7856	+1,2136	—9,7620	353	$\begin{vmatrix} -2,21 \\ -2,31 \\ -2,41 \\ -1,41 \\ -2,15 \end{vmatrix} - \frac{2,45}{0,35}$	+ 3,17
152	37 3 37,20	16,326	,8420	,6908	,2129	,7634	355		- 2,50
153	31 49 13,69	16,325	,8293	,6327	,2129	,7684	356		+ 0,15
154	41 9 5,57	16,282	,8519	,7279	,2117	,7657	359		- 1,71
155	37 8 12,16	16,121	,8482	,6861	,2074	,7739	364		- 0,56
156	46 34 42,20	16,078	+9,8639	—9,7654	+1,2062	9,7759	367	$ \begin{vmatrix} - & - & 2,72 \\ -3,38 & -3,57 \\ -2,89 & -3,39 \end{vmatrix} $	+ 6,13
157	49 5 39,95	16,002	,8686	,7805	,2042	,7796	369		- 5,40
158	51 47 48,57	15,977	,8704	,7967	,2035	,7808	370		- 2,62
159	38 30 26,44	15,963	,8649	,6953	,2031	,7815	371		- 4,35
160	63 17 22,63	15,913	,8681	,8507	,2018	,7838	373		+ 3,47
161	41 26 26.87	15,839	+9,8633	9,7185	+1,1997	9,7872	375	- 2,77	$\begin{array}{r} -2,47 \\ -5,18 \\ +1,86 \\ +0,91 \\ +4,21 \end{array}$
162	38 40 55,66	15,785	,8591	,6921	,1982	,7897	377	- 2,93	
163	53 14 13,64	15,782	,8768	,7998	,1982	,7898	378	- 4,38	
164	45 25 42,07	15,757	,8716	,7480	,1975	,7909	379	- 3,43	
165	45 24 4,98	15,757	,8722	,7479	,1975	,7909	380	- 3,58	
166	31 19 17,54	15,717	+9,8407	-9,6100	十1,1964	—9,7927	381	$\begin{vmatrix} -2,95 \\ -2,85 \\ -2,24 \\ -1,65 \end{vmatrix} + 1,03 \\ -4,67 \\ -1,65$	+ 5,16
167	32 9 23,99	15,691	,8439	,6198	,1957	,7938	382		+ 0,66
168	55 14 15,52	15,689	,8831	,8054	,1928	,7982	388		- 5,92
169	31 45 3,86	15,552	,8451	,6108	,1918	,7998	389		+ 3,39
170	47 12 16,13	15,645	,8791	,7551	,1916	,8 <b>0</b> 01	392		- 3,10
171	56 58 51,90	15,523	+9,8842	9,8125	+1,1910	-9,8010	393	$\begin{vmatrix} -2,81 \\ -2,96 \\ -3,08 \end{vmatrix} - 3,35 \\ +1,08 \\ -2,15 \\ -3,08 \end{vmatrix}$	- 2,86
172	51 29 33,76	15,501	,8842	,7818	,1904	,8020	397		+ 4,56
173	26 10 43,60	15,601	,8248	,5329	,1904	,8020	394		+ 3,81
174	53 14 51,42	15,401	,8876	,7893	,1875	,8061	403		+ 3,78
175	31 9 20,00	15,393	,8463	,5989	,1873	,8064	402		- 0,67
176 177 178 179 180	38 50 42,16 43 30 38,71 46 57 46,14 30 29 47 0 53,49	15,386 15,368 15,375 15,194 15,171	+9,8692 ,8791 ,8831 ,8476 ,8848	-9,6823 ,7223 ,7487 ,5848 ,7432	+1,1871 ,1866 ,1868 ,1817 ,1810	—9,8067 ,8075 ,8072 ,8143 ,8155	404 406 405 416 418	— 2,91   — — — — — — — — — — — — — — — — — —	+ 2,16 + 4,25 + 4,60 + 4,99

No.	Names.	Mng.	No.		Annual		Logarit	hms of	
1,0.	. Traines.	ling.	Obs.	Jan. 1, 1840.	Precess.	a	6	С	d
181 182 183 184 185	Horologii. Eridani. Horologii. Fornacia. Eridani.	6.7 6.7 7 6	4 3 3 3	11. M. s. 2 46 46 40,15 46 41,65 48 15,59 49 37,32	+1,655 2,267 1,654 2,460 2,331	+8,9818 ,8262 ,9707 ,7763 ,8032	+8,9184 ,7760 ,9208 ,7328 ,7643	+0,2188 ,3554 ,2185 ,3909 ,3675	8,9115 ,6520 ,8983 ,5258
186 187 188 189 190	Fornacis.	7 6.7 7 7 7.8	3 4 3 3 3	50 12,24 50 22,73 50 30,29 50 50,85 51 45,41	2,635 2,411 2,388 2,383 2,459	+8,7358 ,7826 ,7878 ,7878 ,7686	+8,6991 ,7467 ,7521 ,7537 ,7377	+0,4208 ,3822 ,3781 ,3771 ,3907	8,3714 ,5519 ,5666 ,5680
191 192 193 194	Fornacis. Eridani. Horologii. Eridani. Fornacis.	6.7 7 7.8 7 6.7	3 3 4 3 3	52 17,99 52 18,72 52 58,83 54 11,72 54 30,27	2,554 2,339 1,729 2,224 2,452	-1-8,7476 ,7944 ,9345 ,8162 ,7635	+8,7192 ,7658 ,9081 ,7948 ,7430	+0,4072 ,3690 ,2378 ,3471 ,3895	8,4404 ,5896 ,8512 ,6458
196 197 198 199 200	Horologii. Eridani. Horologii. Eridani. Fornaois.	7 .8 7.8 8 8	3 3 5 3	54 50,60 55 5,90 56 19,54 56 29,17 57 57,70	1,772 2,236 1,430 2,028 2,288	+8,9192 ,8110 ,9869 ,85,58 ,7914	+8,9000 ,7928 ,9732 ,8429 ,7841	+0,2485 ,3495 ,1553 ,3071 ,3595	8,830 ,6363 ,9263 ,728
201 202 203 204 205	Horologii. Fornacis.	8 7 8 7	5 - 1 5 1	58 50,11 58 59 19,55 59 32,89 59 39,16	1,868 1,856 1,337 1,864 2,352	+8,8883 ,8852 ,9949 ,8842 ,7 <b>7</b> 69	+8,8804 ,8819 ,9927 ,8826 ,7762	+0,2714 ,2709 ,1261 ,2704 ,3677	8,7850 ,7814 ,9386 ,7800 ,5658
206 207 208 209 210	Horologii. Fornacis. Horologii. Fornacis.	5,6 7 7.8 7 7.8	2 3 2 3 5	59 51,18 59 58,12 3 0 13,99 0 35,95 1 56,91	1,409 2,509 1,329 1,311 2,271	+8,9792 ,7382 ,9934 ,99 <b>5</b> 8 ,7845	-8,9789 ,7387 ,9947 ,9983 ,7924	+0,1489 ,3995 ,1235 ,1176 ,3562	8,9189 ,4447 ,9371 ,9404 ,5917
211 212 213 214 215	Fornacis. Eridani. Fornacis. Horologii.	6.7 8 7.8 8.9 7	5 3 3 3 3	2 22,72 2 40,19 2 57,66 3 4 10,88	2,373 2,209 2,473 1,886 1,940	-1-8,7608 ,7968 ,7384 ,8701 ,8532	+8,7704 ,8072 ,7500 ,8797 ,8691	+0,3753 ,3442 ,3932 ,2755 ,2878	-8, <b>5</b> 303 ,6217 ,4608 ,7608
216 217 218 219 220	Horologii. Fornacis. Horologii.	8 7 7 —	3 3 - 8	4 11,56 4 39,76 4 41,88 4 5 15,73	1,942 2,269 1,274 1,944 1,943	+8,8525 ,7777 ,9891 ,8490 ,8490	+8,8686 8,7956 9,0070 8,8690 8,8692	+0,2882 ,3658 ,1052 ,2887 ,2885	-8,7334 ,6824 ,9340 ,7288 ,7290
221 222 223 224 225	Horologii. Fornacis. Horologii. Fornacis.	8 7 7 6.7 6	4 5 3 5 3	5 25,76 5 48,50 6 1,99 6 40,01 6 57,75	1,629 2,266 2,469 1,487 2,496	+8,9158 ,7752 ,7317 ,9408 ,7238	+8,9372 ,7977 ,7549 ,9666 ,7508	+0,2119 ,3653 ,3925 ,1723 ,3972	8,8348 ,5798 ,4528 ,871 ,428

	Declination.	Annual		Logari	thms of		Diffe		he Brisbane scension	Catalogue.
No.	(South.) Jan, 1, 1840.	Precession	a'	b'	c'	d'	No.		om } T.	Declin.
181 182 183 184 185	59 17 42 2 54,08 57 51 7,25 34 10 40,66 39 18 1,49	-1-15,163 14,963 14,960 14,862 14,792	+9,8943 ,8854 ,8998 ,8669 ,8825	—9,8085 ,6989 ,8006 ,6196 ,6696	-1-1,1808 ,1750 ,1749 ,1721 ,1700	-9,8155 ,8230 ,8231 ,8266 ,8291	419 428 429 431 436	- 3,00 + 4,60 - 2,52 - 2,14	3,57	+ 2,56 - 0,91 + 5,26 + 2,01
186 187 188 189 190	25 36 52,77 36 1 31,94 36 56 37,39 37 4 44,99 33 47 41,35	14,756 14,744 14,740 14,716 14,655	+9,8344 ,8745 ,8774 ,8779 ,8692	9,5026 ,6359 ,6454 ,646 <b>0</b> ,6095	+1,1690 ,1686 ,1686 ,1678 ,1663	-9,8304 ,8308 ,8309 ,8317 ,8336	437 438 440 441 445	- 2,60 - 2,15 - 4,05 - 1,83 - 2,91		+ 3,83 + 5,46 + 2,20 + 2,11 - 7,93
191 192 193 194 195	29 32 48,60 38 38 3,33 55 39 31,73 42 30 40,94 33 44 46,03	14,626 14,629 14,593 14,517 14,501	+9,8525 ,8842 ,9090 ,8954 ,8710	9,5560 ,6586 ,7789 ,696 ,6040	+1,1661 ,1652 ,1641 ,1619 ,1614	—9,8349 ,8347 ,8369 ,8385 ,8391	442 448 452 455 456	- 2,62 - 0,63 - 3,27 - 2,91		- 5,35 + 3,47 - 6,13 - 2,34 + 2,11
196 197 198 199 200	54 32 49,41 41 59 10,88 60 27 18,91 48 11 26,09 39 47 57,07	14,481 14,465 14,392 14,380 14,290	+9,9112 ,8949 ,9127 ,9079 ,8932	-9,7697 ,6836 ,7956 ,7281 ,6592	+1,1608 ,1603 ,1581 ,1577 ,1550	—9,8397 ,8402 ,8425 ,8429 ,8458	458 459 464 463 468	- 1,47 - 2,64 - 0,28 - 2,18 - 1,72	- <u>3,57</u>	- 1,38 + 1,42 + 0,62 - 0,36 - 1,64
201 202 203 204 205	52 2 21,03 51 57 61 25 30,06 51 56 58,49 37 57 41,47	14,298 14,208 14,196 14,183	-9,9138 ,9164 ,9164 ,9154 ,8899	-9,7501 ,7473 ,7942 ,7464 ,6387	+1,1553 ,1530 ,1525 ,1522 ,1518	—9,8455 ,8478 ,8483 ,8487 ,8491	467 470 472 473 474	-60,92 + 0,27 - 2,01		$ \begin{array}{c c} -5,56 \\ -1,18 \\ +1,16 \\ +1,74 \end{array} $
206 207 208 209 210	60 21 40,65 30 36 25,43 61 27 58,51 61 40 13,97 39 54 48,80	14,175 14,163 14,150 14,130 14,042	+9,9185 ,8651 ,9186 ,9196 ,8971	-9,7887 ,5558 ,7925 ,7928 ,6527	+1,1515 ,1511 ,1508 ,1501 ,1474	—9,8494 ,8497 ,85 <b>01</b> ,850 <b>7</b> ,8534		- 2,06 - 2,85 + 0,68 + 0,45 - 2,54	- 2,40 	$ \begin{array}{c c} -3,24 \\ -2,21 \\ +4,70 \\ +10,39 \\ -2,38 \end{array} $
211 212 213 214 215	36 2 33,37 41 57 9,86 31 52 0,79 51 4 49 35 29,66	14,013 13,997 13,980 13,877	+9,8876 ,9036 ,8727 ,9185 ,9185	-9,6142 ,6692 ,5660 ,7354 ,7227	+1,1465 ,1460 ,1455 ,1466 ,1423	-9,8542 ,8547 ,8552 ,8542 ,8573	484 485 483	- 1,84 - 3,01 - 2,50 - 6,98	- 3,30 	- 1,67 + 6,04 + 1,39 - 2,25
216 217 218 219 220	49 34 28,17 39 39 40,58 61 45 46,20 49 20 49 20 26,98	13,905 13,876 13,876 13,842 13,837	+9,9186 ,9004 ,9248 ,9196 ,9201	9,7222 ,6451 ,7852 ,7191 ,7191	+1,1432 ,1422 ,1422 ,1412 ,1411	—9,8574 ,8583 ,8583 ,8592 ,8594	489 490 491 494 495	- 3,53 - 9,77 - 0,04 - 2,66		* - 3,32 + 2,20 - 2,38
221 22 <b>2</b> 223 224 226	56 5 45,76 39 37 39,09 31 43 58,60 58 24 53,72 30 24 19,34	13,817 13,799 13,787 13,744 13,723	+9,9258 ,9015 ,8751 ,9284 ,8704	-9,7575 ,6425 ,5583 ,7665 ,5397	+1,1404 ,1399 ,1396 ,1381 ,1375	9,8600 ,8604 ,8608 ,8620 ,8626	496 497 498 503 502	+ 7,52 2,76 2,37		- 4,29 - 2,94 + 1,04 + 3,90 + 5,38

No	Names.	Mag.	No.	Right Ascen	Annual		Logarit	hms of	
1.140'	Names.	mag.	Obs.	Jan. 1, 1840.	Precesn.	a	<i>b</i>	С	d
226 227 228 229 230	Reticuli, Horologii, Eridani, Horologii,	9 7.8 7 7 6.7	3 3 4 3	11. M. B. 3 7 2,20 7 4,11 7 25,06 7 47,91 8 30,60	s. +1,162 2,021 2,191 2,266 1,507	+9,0014 8,8261 8,7873 8,7698 8,9310	+9,0285 8,8534 8,8159 8,7997 8,9637	+0,0652 ,3056 ,3406 ,3553 ,1781	8,9510 ,6907 ,6126 ,5725 ,8590
231 232 233 234 235	Fornacis. Eridani. Fornacis. Eridani.	8 7 8 7 6.7	3 2 5 3	9 5,51 9 23,02 9 25,95 9 35,84 9 41,83	2,412 2,254 2,188 2,468 2,039	+8,7352 ,7677 ,7822 ,7232 ,8142	+8,7704 ,8038 ,8184 ,7596 ,8514	+0,3824 ,3529 ,3400 ,3923 ,3094	8,4799 ,5719 ,6062 ,4400 ,6730
236 237 238 239 240	Eridani. Horologii. Eridani. Horologii.	7.8 8 7.8 7.8 6	3 3 5 3	9 57,28 10 55,00 11 15,24 12 7,86 12 14,01	2,121 2,182 1,347 2,264 1,951	+8,7954 ,7793 ,9631 ,7676 ,8269	+8,8339 ,8213 ,9959 ,8051 ,8727	+0,3265 ,3388 ,1294 ,3549 ,2903	8,6361 ,6035 ,8910 ,5559 ,6991
241 242 243 244 245	Fornacis. Eridani. Fornacis. Eridani.	7.8 7.8 6.7 6 7.8	3 4 3 3	12 23,91 12 32,70 12 36,67 13 0,62 13 49,63	2,353 2,266 2,610 2,354 2,130	+8,7389 ,7567 ,6896 ,7367 ,7818	+8,7865 ,8048 ,7377 ,7866 ,8353	+0,3716 ,3553 ,4166 ,3718 ,3284	8,5053 ,5543 ,3104 ,5014 ,6167
246 247 248 249 250	Fornacis. Eridani, Fornacis. Horologii.	7 6.7 5.6 5.6 7	4 3 2 3 3	13 53,76 13 55,56 14 24,45 15 23,93 16 23,27	2,562 2,555 2,617 2,574 1,939	+8,6942 ,6957 ,6840 ,7889 ,8156	+8,7482 ,7493 ,7392 ,7477 ,8785	+0,4086 ,4074 ,4178 ,4106 ,2876	8,3492 ,3552 ,2967 ,3331 ,6878
251 252 253 254 255	Eridani. Fornacis. Eridani.	7.8 7.8 6 7	2 4 3 4 3	16 41,65 17 9,78 17 19,40 18 21,30 18 35,30	2,248 2,162 2,403 2,159 2,470	+8,7487 ,7656 ,7154 ,7629 ,6990	+8,8126 ,8313 ,7818 ,8532 ,7704	+0,3518 ,3349 ,3807 ,3342 ,3927	-8,5477 ,5895 ,4546 ,5865 ,4032
256 257 258 259 260	Eridani. Fornacis.  P Horologii. Eridani.	8 6 7 6.7 8	3 3 2 2 5	19 33,72 19 37,73 19 48,42 19 51,50 20 45,07	2,244 2,527 2,311 1,776 2,172	+8,7414 ,6860 ,7268 ,8391 ,7528	+8,8163 ,7614 ,8030 ,9150 ,8326	+0,3510 ,4026 ,3638 ,2494 ,3369	-8,5390 ,3557 ,5012 ,7333 ,5708
261 262 263 264 264 265	Fornacis, Eridani Fornacis, Horologii	6.7 8 7.8 6.7 6	3 3 5 5 3	22 35,14 24 54,55 25 6,09 25 29,38 27 49,21	2,566 2,173 2,362 1,912 1,773	+8,7082 ,7402 ,7016 ,7927 ,8136	+8,7949 ,8360 ,7982 ,8905 ,9205	+0,3740 ,3371 ,3733 ,2815 ,2487	-8,4580 ,5541 ,4501 ,6630 ,7035
266 267 268 269 270	Eridani. Fornacis. Eridani.	8 6 6 6.7 6.7	б 3 5 3 3	27 52,01 28 8,79 30 35,57 30 37,32 31 0,60	2,228 2,399 2,343 2,446 2,272	+8,7199 ,6801 ,6895 ,6705 ,7019	+8,8274 ,7943 ,8074 ,7884 ,8216	+0,3479 ,3800 ,3698 ,3885 ,3564	-8,5147 ,4151 ,4404 ,3741 ,4793

`NT	Declination	Annual		Logar	ithms of		Diffe		the Brisbane Ascension	Catalogue.
No.	(South) Jan. 1, 1840,	Precession	a'	b'	c'	d'	No.		rom   T.	Declin.
226 227 228 229 230	62 57 27,30 47 5 24,83 41 58 49,46 39 24 25,80 57 55 16,78	13,723 13,719 13,698 13,677 13,629	+9,9279 ,9186 ,9085 ,9025 ,9304	-9,7852 ,7000 ,6600 ,6365 ,7605	+ 1,1375 ,1373 ,1366 ,1360 ,1345	-9,8626 ,8627 ,8633 ,8639 ,8668	506 505 507 508 511	s. + 3,01 - 2,29 - 2,64 - 3,88 + 0,35	- 3,36 - 1,65	- 1,89 - 2,92 - 3,50 + 0,02 + 6,91
231 232 233 234 235	33 46 7,62 39 35 49,84 41 49 33,61 31 25 17,45 46 15 56,15	13,585 13,570 13,570 13,565 13,563	+9,8870 ,9047 ,9101 ,8768 ,9201	9,5759 ,6349 ,6546 ,5474 ,6889	+1,1331 ,1326 ,1326 ,1324 ,1320	-9,8663 ,8668 ,8668 ,8669 ,8673	512 513 514 515 516	$ \begin{array}{r} -2,25 \\ -1,46 \\ -2,60 \\ -1,82 \end{array} $		+ 8,52 - 0,64 + 5,35 - 0,75 + 5,39
236 237 238 239 240	43 53 44,38 41 51 39,28 60 6 26,66 38 57 54,03 48 20 25,96	13,631 13,471 13,458 13,376 13,388	+9,9159 ,9122 ,9335 ,9063 ,9258	9,6701 ,6537 ,7649 ,6228 ,6981	+1,1313 ,1294 ,1290 ,1263 ,1267	—9,8679 ,8695 ,8698 ,8720 ,8716	517 519 521 525 523	+ 2,84 + 0,24 - 2,45 + 13,82 - 1,98	- 2,81 - 0,94	- 0,43 + 1,47 + 0,03 + 7,28 + 0,77
241 242 243 244 245	35 45 12,19 38 53 18,30 24 42 24,84 35 35 14,06 43 9 13,93	13,376 13,367 13,369 13,336 13,275	+9,8960 ,9058 ,8488 ,8960 ,9186	—9,6908 ,6217 ,4449 ,6878 ,6560	+1,1263 ,1260 ,1260 ,1250 ,1230	-9,8720 ,8722 ,8722 ,8730 ,8740	527 526 528	$ \begin{array}{c c} -3,49 \\ -2,50 \\ -3,19 \\ +3,51 \end{array} $		+ 0,20 + 7,46 - 0,56 + 2,34 + 2,35
246 247 248 249 250	26 52 27,60 27 11 17,70 24 12 45,42 26 9 48,64 48 21 2,35	13,271 13,271 13,245 13,183 13,113	+9,8603 ,8621 ,8482 ,8586 ,9304	9,4758 ,4805 ,4328 ,4623 ,6880	+1,1229 ,1229 ,1220 ,1200 ,1177	-9,8740 ,8746 ,8753 ,8769 ,8787	531 532 534 538 539		+ 0,64	+ 4,46 + 2,23 + 4,48 + 4,27 -9 48,00
261 262 253 254 255	39 1 56,66 41 50 9,13 33 16 39,22 41 47 55,58 30 24 39,19	13,095 13,065 13,051 12,986 12,966	+9,9101 ,9185 ,8921 ,9196 ,8808	-9,6142 ,6380 ,5529 ,6352 ,5151	+ 1,1171 ,1161 ,1156 ,1154 ,1128	9,8791 ,8798 ,8802 ,8818 ,8822	542   543   544   544	_ 2,50	- 1,89 - 3,09	+ 1,20 + 2,31 - 2,38 - 3,31
256 257 258 259 260	38 51 39,62 27 52 58,02 36 31 20,26 51 37 43,80 41 7 55,70	12,904 12,896 12,882 12,887 12,819	+9,9127 ,8704 ,9058 ,9390 ,92 <b>0</b> 1	—9,6064 ,4782 ,5825 ,7025 ,6239	+1,1107 ,1104 ,1100 ,1101 ,1078	-9,8837 ,8839 ,8842 ,8841 ,8857		- 3,37 - 2,11 - 1,89 - 1,17	- <del>2,83</del> - <del>1,69</del>	+ 4,88 - 5,69 - 0,19 + 0,60 + 0,94
261 262 263 264 265	34 12 37,45 40 39 45,19 34 5 40,17 47 55 23,02 50 55 27,37	12,698 12,539 12,527 12,503 12,343	+9,8998 ,9227 ,9009 ,9400 ,9469	9,5516. ,6102 ,5444 ,6655 ,6794	+1,1037 ,09×3 ,0978 ,0970 ,0914	9,8885 ,8924 ,8929 ,8929 ,8964	562 563	- 3,29 - 2,53 - 3,13 - 2,50 - 2,18	- 4,28 - 3,05	$ \begin{array}{c c} -2,22 \\ +0,17 \\ +958,08 \\ +4,72 \\ +0,24 \end{array} $
266 267 268 269 270	38 34 24,35 32 24 48,52 34 18 43,06 30 21 35,56 36 49 20,50	12,333 12,320 12,149 12,149 12,117	+9,9191 ,8971 ,9063 ,8904 ,9164	9,5840 ,5177 ,5335 ,4862 ,5689	+1,0911 ,0906 ,0845 ,0845 ,0834	9,8966 ,8969 ,9005 ,9005 ,9012	569 574	+ 3,61 - 2,61 - 3,38 - 1,99 - 0,90	3,19	+ 7,21 - 3,57 + 2,40 - 1,50 - 3,90

No.	Names.	Mag.	No.	Right Ascen.	Annual		Logari	thms of	
			Obs.	Jan. 1, 1840.	Precesn.	a	ь	c	
271 272 273 274 276	Reticuli,	8 -9 7  7.8	6 1 3 -	3 31 3,52 32 49,69 34 29,74 34 34 69,23	8. + 2,340 2,333 2,385 1,169 1,179	+8,6888 ,6848 ,6700 ,9028 ,9003	+8,8085 8,8116 8,8034 9,0371 9,0353	+0,3692 ,3679 ,3775 ,0678 ,0715	-8,4406 ,4377 ,3988 ,8422 ,8391
276 277 278 279 280	Horologii, Eridani, Fornacis,	6.7 7 6 7 7.8	3 3 3 4	35 27,20 37 1,97 38 26,74 38 57,82 39 27,92	1,613 1,927 2,119 2,175 2,359	+8,8182 ,7619 ,7095 ,6964 ,6598	+8,9564 ,8952 ,8586 ,8475 ,8130	+0,2076 ,2849 ,3261 ,3375 ,3727	-8,7229 ,6121 ,5277 ,4982 ,3955
281 282 283 284 284 285	Horologii. Eridani. Horologii.	6.7 7 6.7 6 6	6 5 3 3	39 56,91 40 2,04 40 13,64 40 18,01 40 29,71	1,828 2,178 1,503 1,858 1,616	+8,7615 ,6925 ,8227 ,7548 ,8199	+8,9165 ,8476 ,9788 ,9109 ,9769	+0,2620 ,3381 ,1770 ,2690 ,1807	8,6363 ,4925 ,7369 ,6249
286 287 288 289 290	Horologii. Fornacis. Eridani. Horologii.	7.8 7 7 6.7	3 4 3 3	40 43 56,82 44 24,92 46 48,80 47 41,15	1,817 2,333 2,026 1,885 2,469	-1-8,7615 ,6506 ,7078 ,7264 ,6150	+8,9193 ,8219 ,8804 ,9094 ,8019	+0,2593 ,3679 ,3066 ,2753 ,3925	
291 292 293 294 295	Eridani. Horologii.	6.7 6 6 6 7	3 3 3 3 5	47 54,99 48 36,25 49 38,67 50 22,27 51 18,43	2,070 1,849 1,866 1,564 1,802	+8,6868 ,7271 ,7201 ,7728 ,7262	+8,8743 ,9174 ,9148 ,9720 ,9279	+0,3160 ,2669 ,2709 ,1942 ,2567	—8,5096 ,5937 ,5832 ,6794 ,5988
296 297 298 299 300	Doradus, a Fornacis, Reticuli, Eriduni, Roticuli,	6.7 5.6 9 8 9	3 3 5 4	63 40,57 54 17,94 54 25,68 54 42,84 54 59,18	1,709 2,385 1,297 2,131 1,287	+8,7354 ,6079 ,8070 ,6512 ,8063	+8,9467 8,8218 9,0216 8,8675 9,0235	+0,2327 ,3775 ,1129 ,3286 ,1096	-8,6200 ,3182 ,7316 ,4536 ,7314
301 302 303 304 305	Reticuli, Florologii, Reticuli, Thorologii	6 7.8 6.7 5.6 7	3 2 3 3 5	55 18,26 55 58,55 56 5,78 56 14,33 56 50,49	1,268 1,927 1,309 0,928 2,144	-1-8,8074 ,6852 ,7982 ,8611 ,6410	+9,0269 8,9067 9,0200 9,0832 8,8665	+0,1031 0,2849 0,1169 9,9675 0,3312	-8,7337 ,5338 ,7214 ,8064 ,4381
306 307 308 309 310	Dorndus. Horologii.	7.8 7 7.8 7	3 3 2 3	57 0,46 57 8,54 57 12,99 57 31,18 57 39,68	1,442 1,437 1,437 1,650 1,928	+8,7713 ,7716 ,7713 ,7313 ,6787	+8,9971 ,9979 ,9980 ,9594 ,9074	+0,1590 ,1675 ,1575 ,2175 ,2851	8,6834 ,6840 ,6838 ,6216 ,5262
311 312 313 314 315	Horologii, Reticulia Horologii, Reticuli	7 7 6.7 7.8 7.8	4 3 3 5	57 50,88 58 39,48 58 43,99 59 42,03 59 51,35	1,924 1,908 0,942 1,908 0,911	+8,6787 ,6788 ,8486 ,6748 ,8489	+ 8,9083 8,9118 9,0816 8,9125 9,0868	+0,2842 0,2806 9,9740 0,2806 9,9595	8,5268 ,5295 ,7925 ,5251 ,7940

No.	Declination.	Annual		Logar	ithms of	<del></del>	Diffe		the Brisbane Ascension	Catalogue.
140.	(South.)   Jan. 1. 1840.	Precession	a'	b'	c'	d'	No.		om   T.	Declin.
271 272 273 274 275	34 23 22,20 34 29 23,83 32 23 12,39 60 28 60 18 3,82	+12,119 11,991 11,873 11,860 11,846	+9,9074 ,9096 ,9015 ,9614 ,9614	-9,5333 ,5339 ,6015 ,7116 ,7104	+1,0834 ,0789 ,0746 ,0741 ,0736	-9,9012 ,9038 ,9061 ,9064 ,9067	577 581 584 585 586	- 0,30 - 0,62 - 5,84 - 3,08		+12,59 +20,00 - 2,39  + 0,13
276 277 278 279 280	53 25 47,04 46 28 14,05 41 9 46,89 39 19 33,14 32 58 58,46	11,789 11,699 11,697 11,560 11,523	+9,9581 ,9489 ,9356 ,9309 ,9079	-9,6743 ,6264 ,5806 ,5628 ,4954	+1,0715 ,0682 ,0643 ,0629 ,0616	—9,9078 ,9095 ,9115 ,9122 ,9128	588 592 594 595 596	- 2,52 - 3,07	- 0,26 - 2,67	+ 0,26 - 1,62 - 4,20 - 3,98 +10,79
281 282 283 284 286	48 33 36,52 39 5 3,16 54 59 17,78 47 51 37,25 54 46 51,65	11,490 11,490 11,472 11,472 11,477	+9,9547 ,9309 ,9643 ,9538 ,9638	-9,6332 ,5684 ,6700 ,6277 ,6693	+1,0603 ,0603 ,0596 ,0506 ,0591	9,9134 ,9134 ,9138 ,9138 ,9141	600 599 605 601 602	-10,71 +29,39	- 1,39 3,88 - 2,74	+ 7,34 - 4,75 - 2,66 + 0,20 - 1,49
286 287 288 289 290	48 46 33 36 4,12 43 12 52,69 46 38 37,76 28 8 48,21	11,443 11,202 11,168 10,993 10,925	+9,9557 ,9138 ,9464 ,9571 ,8910	-9,6328 ,4902 ,5815 ,6007 ,4100	+1,0585 ,0493 ,0480 ,0413 ,0384	-9,9143 ,9187 ,9192 ,9223 ,9234	604 613 615 619 621	- 2,85 - 1,55	- 2,89 - 1,42 - 2,45	+10,73 + 7,89 + 2,79 - 3,48
291 292 293 294 295	41 42 6,02 47 22 0,33 46 53 16,38 53 9 29,10 48 14 0,60	10,915 10,867 10,787 10,767 10,665	+9,9614 ,9600 ,9600 ,9708 ,9638	—9,6093 ,6007 ,5942 ,6334 ,5986	-+1,0880 ,0361 ,0329 ,0321 ,0279	—9,9286 ,9244 ,9257 ,9260 ,9277	622 624 627 628 631	2,32 - 2,54	- 2,52 - 1,29 - 1,22	+ 2,73 + 0,47 - 0,92 + 0,37 + 9,80
296 297 298 299 300	50 4 15,97 30 56 41,85 57 13 33,34 39 23 42,97 57 20 15,69	10,496 10,437 10,437 10,407 10,392	+9,9694 ,9095 ,9791 ,9430 ,9800	-9,6037 ,4267 ,6413 ,5178 ,6399	+1,0210 ,0186 ,0186 ,0173 ,0167	9,9304 ,9318 ,9813 ,9318 ,9320	633 635 636 637 638	- 1,87 2,14 1,75 + 0,20	2,17 - 2,95 	+ 0,44 0,57 6,54 6,53 18,59
301 302 303 304 305	57 33 24,37 44 53 56,46 56 55 40,53 61 51 12,91 38 49 55,20	10,352 10,317 10,312 10,307 10,247	-F9,9800 ,9605 ,9800 ,9827 ,9430	-9,6394 ,5602 ,6345 ,6565 ,5058	+1,0150 ,0135 ,0133 ,0131 ,0106	-9,9326 ,9331 ,9332 ,9333 ,0342	639 640 641 642 643	- 1,83 - 2,08 - 2,19 - 3,49 - 1,24		+ 4,75 - 0,50 - 4,23 + 2,40 + 5,84
306 307 308 309 310	54 46 27,36 54 50 31,68 54 51 20,76 50 57 21,85 44 44 37,01	10,242 10,232 10,227 10,206 10,192	+9,9786 ,9 <b>7</b> 91 ,979 I ,9736 ,9609	9,6206 ,6205 ,6203 ,5969 ,5538	-F1,0104 ,0009 ,0097 ,0087 ,0082	—9,0843 ,9844 ,9845 ,9349 ,0350	644. 645 646 647 648	- 4,40 - 2,60 - 0,61 - 2,85		$\begin{array}{r} -2,17 \\ +2,62 \\ -4,36 \\ +3,44 \\ +3,74 \end{array}$
311 312 313 314 315	44 49 59,40 45 10 32,86 61 31 40,53 45 6 25,40 61 48 9,82	10,176 10,117 10,117 10,036 10,031	+9,9614 ,9628 ,9854 ,9657 ,9859	9,6538 ,5538 ,6471 ,6499 ,6446	+1,0076 ,0050 ,0050 ,0016 ,0013	-9,0352 ,9361 ,9361 ,9373 ,9374		— 2,32 — 2,17 — 2,25 — 2,72 — 4,21	- 2,85 - 2,85	- 5,52 - 3,97 + 4,43 + 1,86 + 10,99

No.	Names.	Mag.	No.		Annual		Logarit	hms of	
*,0,	rumes,	mang.	Obs.	Jan. 1, 1840.	Precesn.	a	ь	c	d
316 317 318 319 320	Horologii. Reticuli. Horologii.	8 8 6.7 6.7 7	6 3 3 5 4	н. м. s. 4 I 9,87 1 13,00 2 9,30 2 21,03 2 56,63	+1,994 1,104 1,970 1,678 1,970	+8,6530 ,8095 ,6536 ,7071 ,6504	+8,8972 9,0566 8,9021 8,9565 8,9025	+0,2997 ,0430 ,2945 ,2248 ,2945	
321 322 323 324 325	Reticuli. Horologii. ——— Eridani. Cæli Sclup.	8 6.7 7.8 6.7 7	3 3 5 5 5	3 25,25 3 37,31 4 42,65 4 49,20 5 0,02	1,022 1,847 2,001 2,227 2,052	+8,8163 ,6711 ,6377 ,5966 ,6271	+9,0702 8,9258 8,8978 8,8570 8,8888	+0,0094 ,2665 ,3012 ,3477 ,3122	8,7551 ,5301 ,4660 ,3625 ,4435
326 327 328 329 330	Eridani. Cæli Sculp. Horologii. Doradus.	7 6.7 7 7	2 3 3 2	7 42,83 8 6,92 8 10,33 9 15,12 10 36,63	2,374 2,051 2,165 1,820 1,138	+8,5605 ,6151 ,5944 ,6530 ,7670	+ 8,8345 8,8907 8,8702 8,9335 9,0533	+0,3755 ,3120 ,3355 ,2601 ,0561	8,2660 ,4299 ,3780 ,5137
331 332 333 334 335	<ul> <li>Horologii.</li> <li>Cæli Sculp.</li> <li>Doradus.</li> <li>Reticuli.</li> <li>Doradus.</li> </ul>	7 8 5 7 7.8	3 3 5 5	10 53,09 11 38,65 11 50,64 13 57,30 14 18,83	2,097 2,096 1,551 0,882 1,463	+8,5955 ,5926 ,6907 ,7932 ,6953	+8,8840 8,8845 8,9843 9,0945 8,9995	+0,3216 0,3214 0,1906 9,9465 0,1652	8,3969 ,3937 ,5860 ,7864 ,5993
336 337 338 339 340	Cwli Sculp. Doradus.  Cwli Sculp.	7 7.8 6.7 8 6.7	3 3 3 2 3	14 29,22 14 43,65 14 43,67 15 6,94 18 46,91	1,977 1,462 1,465 1,459 2,039	+8,6021 ,6935 ,6933 ,6926 ,5729	+8,9076 8,9999 8,9993 9,0006 8,8987	+0,2960 ,1649 ,1658 ,1641 ,3094	8,4304 ,5976 ,5909 ,5967 ,3849
341 342 343 344 346	Cæli Sculp. Horologii. Cæli Sculp. Ilorologii.	7 7 7 7	3 3 5 3 3	19 28,49 19 32,30 19 32,41 20 47,48 20 50,29	1,884 1,770 2,183 2,088 1,846	+8,5974 ,6174 ,5415 ,5551 ,6973	+8,9267 8,9471 8,8755 8,8911 8,9342	+0,2751 ,2480 ,3391 ,3197 ,2662	8,4421 ,4814 ,3111 ,3534 ,4482
346 347 348 349 350	Doradus. • Cali Soulp. Eridani. Cali Soulp.	7 6.7 8 6 7	3 3 1 3 2	21 5,59 21 14,28 22 16,46 22 24,03 22 47,42	1,170 2,017 2,360 1,750 2,118	+8,7138 ,5658 ,5026 ,6079 ,5412	+9,0510 8,9038 8,8462 8,9519 8,8868	-+ 0,0685 ,3047 ,3739 ,2430 ,3269	8,6394 ,3818 ,2029 ,474:
351 352 358 354 355	Reticuli. Cwli Sculp. Cwli Sculp.	6.7 6.7 7 7	3 3 3	22 53,36 22 55,41 23 44,84 24 36,46 25 10,49	0,817 1,958 2,079 1,763 2,139	+ 8,7602 ,5683 ,5434 ,5936 ,5264	+9,1062 8,9149 8,8941 8,9505 8,8846	+9,9122 0,2918 0,3178 0,2462 0,3302	
356 357 358 359 360	Cæli Sculp.  Doradus.  Cæli Sculp.	7 7 7 5.6 7	3 3 3 5	27 8,24 27 26,72 28 53,43 30 32,90 30 49,01	2,175 2,087 0,926 1,279 2,097	+8,6113 ,6247 ,7142 ,6494 ,6067	+8,8796 8,8948 9,0910 9,0354 8,8945	+0,3375 0,3195 9,9666 0,1069 0,3216	—8,280 ,320 ,652 ,564 ,297

NT.	Declination.	Annual		Loga	rithms of	<del></del>	Diff:			Catalogue.
No.	Jan. 1. 1840.	Precession		b'		d'	No.	Right A	Ascension rom	Declin.
316 317 318 319 320	59 23 31,74 43 20 45,23 50 3 37,55	+9,024 9,873 9,848 9,833 9,787	+9,9581 ,9868 ,9609 ,9763 ,9614	9,5268 ,6274 ,5279 ,5753 ,5247	,9945 ,9934 ,9927	-9,9389 ,9396 ,9400 ,9402 ,9408	657 658 659 661 662	s. - 3,78 - 2,22 - 1,79 - 1,92 - 2,10	s. - 1,02	+ 8,43 + 2,30 - 0,43 - 6,37 + 2,22
321 322 323 324 326		9,757 9,742 9,650 9,644 9,624	+9,9886 ,9694 ,9595 ,9360 ,9557	-9,6262 ,5457 ,5109 ,4483 ,4978	,9886 ,9845 ,9843	-9,9413 ,9415 ,9427 ,9428 ,9431	664 663 665 666 667	$ \begin{array}{r}     -3,57 \\     -1,21 \\     -0,86 \end{array} $	-0.02 $-2.71$	$\begin{array}{c} + 2,14 \\ + 1,63 \\ + 6,62 \\ + 2,63 \\ -12,16 \end{array}$
326 327 328 329 330	30 31 19,36 40 46 1,36 37 26 14,16 46 31 59,93 58 25 39,34	9,460 9,388 9,383 9,305 9,207	+9,9143 ,9571 ,9465 ,9736 ,9926	-9,3774 ,4854 ,4640 ,5275 ,5926	9723	-9,9459 ,9462 ,9463 ,9473 ,9485	670 072 673 675 677	- 2,36 - 1,87 - 1,53 - 2,93		- 4,82 + 2,78 - 1,98 - 0,18 + 1,40
331 332 333 354 335	39 16 48,85 39 14 23,39 51 53 32,62 61 20 31,90 63 17 38,70	9,171 9,114 9,104 8,958 8,911	+9,9637 ,9538 ,9863 ,9965 ,9899	-9,4619 ,4688 ,5631 ,6936 ,6520	+0,9624 ,9597 ,9592 ,9522 ,9499	-9,9489 ,9497 ,9498 ,9516 ,9522	682 686	- 1,51 - 1,46 - 2,71 -13,26 - 0,13	3,19	+ 0,53 - 0,23 + 1,11 + 7,64 - 4,61
336 337 338 339 340	42 20 33,19 53 17 43,09 53 15 4,51 53 19 50,79 40 25 30,36	8,890 8,874 8,880 8,848 8,560	+9,9657 ,9908 ,9903 ,9908 ,9624	9,4753 ,5502 ,5501 ,5491 ,4425	+0,9489 ,9481 ,9484 ,9469 ,9324	-9,9524 ,9526 ,9525 ,9529 ,9563	692 691 693	$ \begin{array}{c c} -0,46 \\ +2,31 \\ -1,80 \\ -1,77 \end{array} $	— 3,34 —	+ 1,19 - 3,06 + 0,10 - 0,47 - 3,06
341 342 343 344 345	44 23 24,71 47 0 50,51 36 2 22,73 38 57 0,13 45 13 10,76	8,501 8,494 8,459 8,396 8,380	+9,9745 ,9814 ,9474 ,9586 ,9777	-9,4723 ,4914 ,3950 ,4204 ,4723	+0,9295 ,9291 ,9273 ,9240 ,9232	-9,9569 ,9570 ,9594 ,9581 ,9583	704 705	+ 0,30 - 2,72 + 27,04 - 1,16	- 3,00	+ 4,50 - 0,91 - 0,63 - 1,97 - 3,76
346 347 348 349 360	57 26 7,39 40 53 34,34 30 6 57,48 47 17 42,55 37 57 45,31	8,375 8,364 8,274 8,268 8,242	4-9,9996 ,9657 ,9212 ,9836 ,9552	-9,5467 ,4364 ,3161 ,4820 ,4030	+0,9230 ,9224 ,9177 ,9174 ,9160	—9,9583 ,9584 ,9594 ,9595 ,9598	721   714   -	- 2,63 - 2,14 - 2,58	— 3,7I —	+ 3,36 + 0,60 + 0,63 - 1,97 + 2,84
351 352 353 354 356	61 36 3,56 42 19 1,20 39 2 5,34 46 52 5,73 37 13 24,37	8,236 8,226 8,162 8,066 8,045	+0,0035 9,9708 ,9600 ,9845 ,9542	9,5581 ,4414 ,4089 ,4678 ,3852	+0,9157 ,9152 ,9118 ,9067 ,9056	9,9598 ,9599 ,9606 ,0616 ,9618	717 - 719 - 722	- 2,91 - 2,30 - 1,16 - 3,22	2,18	- 3,72 - 2,46 - 1,97 + 1,92 + 3,69
356 367 368 359 360	36 2 25,67 38 37 25,23 60 6 28,97 55 22 40,23 38 8 58,68	7,890 7,863 7,761 7,621 7,594	+9,9604 9,9606 0,0065 0,0035 9,9605	9,3647 ,3889 ,5200 ,4954 ,3693	+0,8971 ,8956 ,8899 ,8820 ,8805	—9,9634 ,9637 ,9647 ,9601 ,9663	734 <del>-</del> 739 <del>-</del> 744 <del>-</del>	- 1,01 - 0,43 - 2,73 - 2,25 - 1,09		- 0,62 + 1,69 - 0,24 - 0,37 - 4,99

	-			No.	Right Ascen.	Annual	<del></del>	Logarith	,0067         ,1632         ,5016           ,9034         ,3130         ,2940           ,0040         ,1688         ,4891           ,9758         ,2151         ,4355           ,8947         +0,3245         -8,2613           ,9706         ,2235         ,4179           ,8490         ,3815         ,0918           ,8923         ,3288         ,2370           3,9951         ,1853         ,4528           ,8928         ,3288         ,2370           3,9951         ,1550         ,4741           3,8995         ,3212         ,3147           3,9635         ,3147         ,2511           3,9635         ,3147         ,2511           3,9635         ,3263         ,3746           3,9981         ,3120         ,2348           3,0981         0,3120         ,2348           3,1254         9,8525         ,5982           3,8850         0,3418         ,1608           3,0297         +0,1265         ,2304           3,4231         ,4619         ,3483           3,0297         ,2304         ,3483           3,0297         ,3483         ,4231			
	No.	Names.			Jan. 1, 1840.	Precesn.	a	<i>b</i>	c	d		
4-	361 362 363 364 365	Cæli Sculp. Equ. Pict.  E Cæli Sculp. Equ. Pict.	7 9 6.7 6 7	2 5 3 3 3 3	H. M. S. 4 31 11,90 33 50,45 34 44,72 35 6,93 36 10,76	s. +2,171 1,456 2,056 1,475 1,641	+8,4923 ,6029 ,4940 ,5927 ,6689	+ 8,8822 9,0067 8,9034 9,0040 8,9758	,1632 ,3130 ,1688	,5016 ,294 <b>0</b> ,4891		
	366 367 368 369 370	Cwli Sculp. Equ. Pict. Eridani.  Liqu. Pict. Cwli Sculp.	7.8 6.7 6.7 5 7.8	3 3 3	36 12,22 37 24,01 37 49,41 38 40,71 38 41,71	2,111 1,673 2,407 1,532 2,132	+8,4770 ,5461 ,4221 ,5636 ,4600	+ 8,8947 8,9706 8,8490 8,9951 8,8923	,2235 ,3815 ,1853	,4179 ,0918 ,4528		
	371 372 373 374 375	Equ. Pict. Cali Sculp.	6.7 7 7 7 7	5 3 3 3 3	39 25,58 39 53,90 40 56,11 41 30,18 42 53,21	1,643 1,429 2,095 2,064 1,723	+8,5406 ,5744 ,4544 ,4561 ,5115	+ 8,9764 9,0129 8,8996 8,9050 8,9635	,1550 ,3212 ,3147	,4741 ,2411 ,2511		
	376 377 378 379 380	Celi Sculp.  Doradus.  Celi Sculp.	7 6 6.7 8 6.7	53333	44 33,04 44 36,57 44 59,50 45 25,04 46 1,10	1,925 0,928 2,051 0,712 2,197	+8,4686 ,6267 ,4382 ,6532 ,4086	+8,9297 9,0934 8,9081 9,1254 8,8850	9,967 <i>5</i> 0,3120 9,8525	,5616 ,2348 ,5982		
	381 382 383 384 385	Cæli Sculp.	6 7 7 6.7	5 3 3 3	47 21,14 47 22,63 47 29,18 47 35,25 48 17,08	1,338 1,338 1,700 1,443 2,155	+8,6458 ,545 <b>4</b> ,4834 ,526 <b>7</b> ,4014	+9,0297 9,0297 8,9690 9,0124 8,8926	,1265 ,2304 ,1593	,4519 ,3483 ,4231		
	386 387 388 389 390	Cæli Sculp. Equ. Pict. Cæli Sculp. Equ. Pict.	7 8 7 6.7 7	3 3 3 3	48 57,63 49 9,96 49 11,49 50 44,54 51 45,29	2,448 1,278 2,024 2,028 1,266	+8,3535 ,5445 ,4181 ,4074 ,5299	+8,8491 9,0397 8,9145 8,9145 9,0432	,1065	8,4557		
	391 392 393 394 395	Equ. Pict. Cœli Sculp. Doradus.	6.7 7 7 6.7 7	3	52 16,32 53 18,94 54 13,66 54 27,75 55 17,82	0,957 1,250 2,107 0,991 0,999	+8,5734 ,5209 ,3720 ,6539 ,6473	+9,0903 9,0451 8,9027 9,0856 9,0846	+9,9809 0,0969 0,3237 9,9961 0,0000	-8,5056 ,4334 ,1501 ,4838 ,4766		
	396 397 398 399 400	Doradus. Celi Sculp.	7 7 7 5.6 8	3 3 3 3 3	55 19,49 55 24,17 56 18,69 56 19,91 57 23,13	2,093 2,265	+8,4573 ,5491 ,3599 ,3327 ,5401		+0,1920 9,9903 0,3208 0,3651 9,9773	8,3395 ,4796 ,1414 ,0569 ,4720		
	401 402 403 404 406	Equ, Piot. Doradus.	7 6.3 7 8 7		58 38,26 58 50,42 59 3,12	1,536	+8,3790 ,4320 ,4362 ,5289 ,4324	8,9945 8,9996 9,0934	+0,2824 0,1948 0,1864 9,9863 0,1895	-8,2032 ,3113 ,3200 ,4609 ,3148		

	Declination	Annual		Logar	ithms of	<u>, ., ., .</u>	Diffe	rence from t	he Brisbane accension	Catalogue.
No.	(South) Jan. 1, 1840.	Procession	a'	b'	c'	d'	No.	M. C.	om   T.	Declin.
361 362 363 364 365	35 36 50,27 52 22 27,95 39 7 11,52 51 59 19,92 48 50 56,22	+ 7,561 7,356 7,274 7,247 7,166	+9,9518 0,0019 9,9661 0,0009 9,9952	9,3452 ,4634 ,3598 ,4547 ,4300	+0,8786 ,8666 ,8618 ,8602 ,8533	—9,9666 ,9686 ,9693 ,9696	746 753 755 756 761	s. - 3,23 - 5,57 - 1,69 - 4,38 - 3,68	- 3,17	- 0,74 + 8,15 + 0,27 - 2,02 + 3,19
366 367 368 369 370	37 29 51,20 48 7 45,88 27 52 37,36 50 47 7,87 36 45 9,64	7,155 7,067 7,024 6,958 6,947	+9,5600 9,9943 9,9159 0,0004 9,9590	9,3370 ,4185 ,2144 ,4298 ,3168	+0,8546 ,8486 ,8466 ,8425 ,8418	9,9704 ,9713 ,9715 ,9721 ,9722	760 766 769 772 771	- 3,11 - 1,38 - 2,77 - 2,06 + 0,12	<u></u>	- 1,07 + 0,80 + 5,19 - 2,66 - 3,19
371 372 373 374 375	48 38 12,33 52 33 47,79 37 44 46,37 38 35 50,89 46 52 53,62	6,898 6,860 6,768 6,717 6,673	+9,9961 0,0043 9,9638 9,9671 9,9934	9,4122 ,4342 ,3153 ,3199 ,3856	+0,8357 ,8363 ,8305 ,8272 ,8243	9,9726 ,9729 ,9737 ,9741 ,9745	774 777 780 782 785	- 2,96 - 2,15 - 3,56 - 1,30 -47,02		+ 7,53 + 1,23 + 1,18 - 1,08 + 3,78
376 377 378 379 380	42 7 57,21 59 25 13,84 38 50 26,14 61 45 19,74 34 30 39,53	6,470 6,475 6,420 0,403 0,348	+9,9809 0,0154 9,9694 0,0166 9,9513	-9,3350 ,4443 ,3032 ,4494 ,2538	+0,8109 ,8112 ,8075 ,8064 ,8026	9,9761 ,9761 ,9765 ,9766 ,9770	796 797 798 803 806	- 2,68 - 1,35	2,90 2,31 2,97	- 8,66 + 3,41 + 0,96 - 3,47 + 1,07
381 382 383 384 385	53 44 6,06 53 44 0,02 47 7 14,99 51 59 44,94 35 40 33,54	6,248 6,243 6,226 6,220 6,154	+0,0099 0,0099 9,9965 0,0069 9,9581	9,4003 ,3909 ,3573 ,3887 ,2530	- -0,7958 ,7954 ,7942 ,7942 ,7892	9,9778 ,9778 ,9780 ,9780 ,9785	811 812	-1,79 $-2,26$	- 1,90 - 2,51 - 2,92	+ 10,69 + 6,98 + 4,41 + 1,34 + 1,45
386 387 388 389 390	25 50 18,57 54 35 26,10 39 21 4,12 39 11 40,74 54 41 9,38	6,099 6,104 6,088 5,954 5,876	+9,9069 0,0116 9,9727 9,9731 0,0133	—9,1249 ,3948 ,2846 ,273 <i>6</i> ,3788	+0,7852 ,7856 ,7844 ,7748 ,7691	9,9789 ,9789 ,9790 ,9799 ,9805	817 824 823 826 830	$ \begin{array}{c c} -2,93 \\ -11,88 \\ -2,19 \\ -2,26 \end{array} $	- 2,67 - 3,11	+ 1,97 - 4,20 - 4,34 - 2,68 - 2,91
391 392 393 394 395	58 48 25,59 54 51 43,49 36 51 53,85 58 19 11,88 58 12 35,11	5,83 <b>1</b> 5,742 5,664 5,653 5,686	+0,0183 0,0141 9,9647 0,0187 0,0191	9,3960 ,3697 ,2293 ,3802 ,3745	+0,7658 ,7591 ,7531 ,7523 ,7471	9,9808 ,9814 ,9819 ,9820 ,9824	836 840 842	- 2,62 - 2,32 - 2,09 - 5,86 - 3,84	2,65	- 3,51 - 1,85 + 1,15 + 4,58 - 1,22
396 397 398 399 400	49 41 55,52 58 26 58,86 37 12 36,60 32 0 24,76 58 44 4,77	5,574 5,569 5,485 5,485 5,412	+ 0,0056 0,0195 9,9671 9,9435 0,0204	9,3265 ,3744 ,2187 ,1614 ,3633	+0,7462 ,7458 ,7392 ,7392 ,7333	9,9825 ,9825 ,9831 ,9831 ,9836	850 848	- 2,42 - 2,01 - 1,49 - 2,76 - 5,08	3,19	- 1,22 + 3,36 + 0,45 - 3,52 - 5,52
401 402 403 404 405	41 50 15,50 49 22 58,34 49 56 5,36 58 44 50,94 49 43 9,42	5,361 5,294 5,283 5,271 5,260	+9,9845 0,0065 0,0073 0,0208 0,0073	-9,2514 ,3020 ,3048 ,3519 ,3015	+0,7293 ,7238 ,7228 ,7219 ,7210	9,9839 ,9843 ,9844 ,9844 ,9845	861	$ \begin{array}{c c} -3,10 \\ -3,16 \\ -5,18 \\ -3,21 \end{array} $	- 2,23 - 0,66	- 0,03 - 8,19 - 3,18 + 2,91 + 4,56

No.	Names.	Mag.	No.	Right Ascen.	Aunual		Logarit	hins of	
	21651651	lines'	О bя. 	Jan. 1, 1840.	Precesn.	a	6	С	d
406 407 408 409 410	Equ. Pict. Doradus. Equ. Pict. Cwli Sculp.	8 8 6 6 6.7	2 3 3 6	н. м. в. 5 0 16,78 0 57,14 1 40,21 2 33,12 3 22,52	8. +1,538 1,946 1,247 2,130 1,925	+8,4245 ,5142 ,4622 ,3092 ,3367	+8,9995 9,0983 9,0470 8,9018 8,9357	+0,1870 ,2891 ,0959 ,3284 ,2844	
411 412 413 414 416	Equ. Pict. Croli Sculp. Equ. Pict.	7 7 7 8	3 7 6 — 5	4 22,21 5 1,32 5 20,31 6 —— 7 53,49	1,202 1,565 2,307 1,572 1,557	+8,4471 ,3835 ,2601 ,3781 ,3618	+9,0546 8,9960 8,8758 8,9949 8,9978	+0,0821 ,1945 ,3630 ,1964 ,1923	8,3615 8,2625 7,9644 8,2561 8,2412
416 417 418 419 420	Equ. Pict. Columbo.	7.8 6.7 6.7	3 3 7 5	9 10,03 10 10,66 10 21,72 10 — 10 26,21	1,615 1,385 1,152 1,201 2,230	+8,3414 ,3698 ,4054 ,3972 ,2232	+8,9885 9,0264 9,0633 9,0556 8,8890	-1-0,2082 ,1414 ,0614 ,0795 ,3483	8,2131 8,2697 8,3227 8,3108 7,9558
421 422 423 424 425	Columbæ. Equ. Piet.	7 7 7 7 7.8	6 3 3 7	10 56,47 11 43,05 11 58,03 12 35,32 12 42,97	2,269 1,572 1,373 1,573 1,523	+8,2174 ,3255 ,3654 ,3173 ,3238	+8,8831 8,9961 9,0286 8,9960 9,0046	+ 0,3558 ,1964 ,1377 ,1967 ,1827	7,9350 8,2024 8,2541 8,1938 8,2066
426 427 428 429 430	Equ. Pict.  Cwli Sculp.  Equ. Pict.	7 7 6.7 5.6 6.7	4 5 3 3	14 18,77 14 27,92 15 21,38 15 26,90 16 35,51	1,516 1,223 1,971 1,462 1,652	+8,3102 ,3567 ,2249 ,3081 ,2756	+9,0057 9,0527 8,9309 9,0148 8,9836	+0,1807 ,0874 ,2947 ,1649 ,2180	8,1934 8,2681 8,0322 8,1973 8,1411
431 432 433 434 435	Equ. Pict.  Equ. Pict.  Columbo.  Equ. Pict.	7 7.8 7 6 7	3 3 3 5 2	15 46,96 16 3,41 16 45,64 16 46,67 16 52,56	1,815 1,377 1,777 2,403 1,508	+8,2467 ,3165 ,2430 ,1442 ,2866	+8,9567 9,0285 8,9632 8,8658 9,0075	+0,2589 ,1389 ,2497 ,3807 ,1784	8,0861 8,2142 8,0889 7,7993 8,1705
436 437 438 439 440	Equ. Pict. Columbe. Doradus.	6 7.8 7: 7.8 7	2 3 3 2 2	17 37,15 18 9,00 18 21,31 18 21,75 18 35,08	1,403 1,487 2,163 1,089 0,704	+8,2960 ,2706 ,1641 ,3376 ,3926	+9,0245 9,0112 8,9011 9,0739 9,1303	+0,1471 0,1723 0,3351 0,0370 9,8476	-8,1910 8,1566 7,9180 8,2583 8,3341
441 442 443 444 444 445	Equ. Pict.  Dorndus.  Columba.  Equ. Pict.	7.8 7.8 8 6.7 7	2 3 4 5	18 37,72 19 21,89 20 39,64 20 59,25 21 39,98	2,405	+8,3135 ,2577 ,3538 ,1002 ,2632	+9,0519 9,0048 9,1157 8,8667 9,0365	+0,0903 0,1838 9,9074 0,3811 0,1242	8,2238 8,1390 8,2904 7,7631 8,1645
446 447 448 449 450	Columbee, Equ. Pict. Columbes, Equ. Pict, Doradus.	6.7 6.7 5.6 6.7 7	3 3 3 3 3	21 53,91 22 25,67 22 44,72 25 26,43 26 45,30	2,227 1,750 2,061 1,641 0,730	+8,1157 ,1876 ,1313 ,1673 ,3051	+8,8921 8,9685 8,9179 8,9868 9,1271	+0,3477 0,2430 0,3141 0,2151 9,8633	-7,8465 8,0370 7,9145 8,0329 8,2449

	Declination	Annual		Logari	thms of		Diffe		he Brisbane scension	Catalogue.
No	(South.) Jan. 1, 1840.	Precession	a'	b'	c'	d'	No.	fr	om   T.	Declin.
406 407 408 409 410	58 40 5,21 54 57 34,42 35 55 43,65	+ 5,153 5,108 5,046 4,961 4,894	+0,0077 0,0220 0,0170 9,9638 9,9859	9,2933 ,3379 ,3123 ,1620 ,2084	+0,7121 ,7083 ,7029 ,6956 ,6896	9,9851 ,9854 ,9858 ,9863 ,9866	869 873 874 876 881	s. - 0,67 - 3,69 - 2,54 - 2,26 - 3,23	3.	- 1,19 + 1,47 + 0,06 - 1,73 + 7,04
411 412 413 414 416	49 10 57,80 30 25 31,25 49 10	4,801 4,752 4,718 4,707 4,514	+0,0191 0,0082 9,9370 0,0077 0,0090	-9,2940 ,2639 ,0762 ,2488 ,2320	+0,6815 ,6769 ,6738 ,6727 ,6545	-9,9871 ,9874 ,9876 ,9877 ,9887	885 888 882 890 896	$ \begin{array}{c c} -2,37 \\ -2,43 \\ \hline -2,66 \end{array} $		$ \begin{array}{r} -2,06 \\ +3,08 \\ -6,51 \\ +6,20 \end{array} $
416 417 418 419 420	52 12 55,23 55 45 2,77 55 2	4,406 4,315 4,303 4,298 4,230	+0,0069 0,0162 0,0216 0,0966 9,9504	—9,2139 ,2309 ,2492 ,2450 ,0670	+0,6440 ,6350 ,6338 ,6332 ,6263	9,9892 ,9897 ,9897 ,9892 ,9901	902 906 908 909 910	- 3,50 - 2,88 - 2,42		+ 7,61 $+ 0,97$ $- 1,17$ $+ 22,85$
421 422 423 424 426	48 51 48,57 52 21 41,03 48 48 49,06	4,229 4,184 4,161 4,110 4,093	+9,9445 0,0094 0,0170 0,0094 0,0111	9,0420 ,1966 ,2160 ,1886 ,1929	+0,6263 ,6216 ,6192 ,6138 ,6120	—9,9901 ,9903 ,9904 ,9907 ,9908	911 915 916 918 917	- 2,70 - 3,38 - 2,94 -27,38		+12,62 $-0,21$ $+2,97$ $+2,97$ $+6,53$
426 427 428 429 430	54 38 36,38 39 55 8,26 50 46 52,45	3,961 3,956 3,870 3,864 3,863	+0,0124 0,0216 9,9836 0,0145 0,0056	9,1791 ,2067 ,0931 ,1743 ,1494	-1-0,6978 ,5972 ,6877 ,6870 ,5858	9,9913 ,9914 ,9917 ,9918 ,9918	923 925 928 930 931	- 2,80 - 3,88 - 2,10 - 2,36 - 2,37		+27,32 - 5,95 + 1,34 - 3,08 - 2,22
481 432 433 434 434	52 12 9,84 44 37 56,11 26 51 36,89	3,835 3,818 3,750 3,738 3,744	+9,9965 0,0183 9,9991 9,9196 0,0133	-9,1213 9,1777 9,1180 8,9258 9,1552	+ <b>0,</b> 5838 ,5819 ,5740 ,5726 ,5733	-9,9919 ,9920 ,9923 ,9923 ,9923	933 934 937 935 938	- 2,45 - 4,43 - 2,09 + 0,75 - 2,74	- 3,33 - 2,84 - :	+70,30 $-6,01$ $-0,50$ $+10,41$ $+2,08$
436 437 438 439 440	50 15 53,61 34 34 5,67 56 24 8,20	3,681 3,583 3,612 3,618 3,606	+0,0174 0,0141 9,9614 0,0249 0,0298	9,1590 9,1383 9,0097 9,1772 9,1967	+0,5659 ,5643 ,5577 ,5684 ,6671	9,9925 ,9929 ,9928 ,9926 ,9928	942 944 945 946 949	$\begin{array}{c c} -2,15 \\ -2,00 \\ -2,48 \\ -1,46 \\ -4,20 \end{array}$	$ \begin{array}{c c}     \hline                                $	+ 2,71 + 3,96 - 1,22 + 3,60 + 2,57
441 442 443 444 444	49 31 27,64 59 47 1,39 26 43 16,23	3,600 3,451 3,417 3,582 3,331	+0,0224 0,0128 0,0290 9,9196 0,0204	9,1647 9,1273 9,1683 8,8801 9,1219	+0,5564 ,5480 ,5336 ,5292 ,5225	9,9929 ,9931 ,9936 ,9937 ,9939	948 954 960 959 964	$\begin{array}{r} -4,67 \\ -3,28 \\ +0,31 \\ -2,76 \\ -1,38 \end{array}$	——————————————————————————————————————	- 1;00 - 1,24 - 0,51 + 8,72 + 0,54
440 445 448 449 450	7   45 0 3,40 3   37 22 3,01 6   47 12 3,05	3,307 3,273 3,233 3,003 2,985	+9,9528 0,0017 9,9745 0,0086 0,0310	8,9484 9,0625 8,9908 9,0411 9,1129	+0,6195 ,5150 ,6096 ,4775 ,4750	9,9940 ,9941 ,9943 ,9951 ,9951	963 965 966 972 975	$ \begin{array}{c c} -2,95 \\ \hline -2,47 \\ -3,49 \end{array} $	- 2,97 - 2,99 - 2,96 - 2,76	+ 3,81 - 1,87 + 3,77 + 1,31 - 1,87

No.	Names.	Mag.	No.	Right Ascen-	Annual		Logarit	lims of	
No.	IXEINGS.	ming.	Oba.	Jan. 1, 1840	Preceso.	a	<i>b</i>	c	d
451 452 453 454 454 455	Eqn. Piot. Doradus. Equ. Piet. Doradus.	5.6 8.9 7 6.7 10	3 3 3 3 3	11. M. s. 5 25 45,84 26 8,14 26 11,45 27 3,82 27 40,96	8. + 1,642 0,704 1,860 1,694 0,578	+8,1638 8,2036 8,1211 8,1377 8,3026	+8,9868 9,0309 8,9510 8,9782 9,1484	+0,2154 9,8476 0,2695 0,2289 9,7619	-8,0293 8,2446 7,9501 7,9957 8,2486
456 457 458 459 460	Doradus. Columbæ. ————————————————————————————————————	7.8 6 7 7 6.7	3 5 6 6 3	27 47,29 29 22,36 29 35,62 29 55,00 29 56,94	0,586 2,202 2,195 2,339 0,613	+8,3005 8,0245 8,0217 7,9961 8,2640	+9,1472 8,8973 8,8984 8,8776 9,1436	+9,7679 0,3428 0,3414 0,3690 9,7875	8,2462 7,7628 7,7623 7,6791 8,2085
461 462 463 464 465	Equ. Pict. Columbæ. Equ. Pict. Columbæ.	7 7 6 5.6 7	3 3 6 3 3	30 34,55 30 54,24 31 24,19 31 42,63 31 56,76	1,174 2,134 2,342 1,625 2,027	+8,1725 8,0125 7,9739 8,0825 8,0129	+9,0619 8,9079 8,8775 8,9902 8,9248	+0,0697 0,3292 0,3696 0,2108 0,3068	-8,0859 7,7729 7,6556 7,9496 7,8034
466 467 468 469 470	Doradus.  Equ. Pict. Columba. Equ. Pict.	6 8.9 7 7	3 3 4 2 5	33 13,02 33 17,66 33 52,08 34 22,14 35 18,88	0,648 0,675 1,604 1,924 1,168	+8,2090 8,2040 8,0517 7,9906 8,0968	+9,1390 9,1351 8,9939 8,9419 9,0632	+9,8116 9,8293 0,2052 0,2842 0,0674	8,1519 8,1457 7,9214 7,8055 8,0103
471 472 473 474 475	Doradus, Equ. Pict.	8.9 8 7.8 6 8	3 4 4 3	36 19,03 36 42,55 37 59,25 39 9,32 39 9,78	0,616 0,646 1,205 1,695 1,705	4-8,1506 8,1488 8,0419 7,9372 7,9357	+9,1441 9,1395 9,0575 8,9796 8,9780	+9,7896 9,8102 0,0810 0,2292 0,2317	8,1038 8,0917 7,9527 7,7934 7,7904
476 477 478 479 480	Equ. Piet.  Columba. Equ. Pict.	7.8 7 7 7 5.6	5 3 3 3	39 12,92 39 28,36 40 7,86 41 15,36 42 2,31	1,699 1,487 1,976 1,111 1,656	+7,9866 ,9654 ,8717 ,9857 ,8772	+8,9789 9,0134 8,9342 9,0723 8,9861	+0,2302 0,1723 0,2956 0,0457 0,2191	-7,7922 ,8491 ,6741 ,9031 ,7390
481 482 483 484 485	Equ. Piot. Columbo. Equ. Pict. Columbo. Doradus.	7.8 6.7 7 6.7 10	2 3 4 3 2	42 17,34 42 29,34 42 31,46 42 27,31 43 22,30	1,107 2,186 1,126 1,570 0,667	+7,9625 ,7827 ,9546 ,8609 ,9974	-} 9,0730 8,9015 9,0701 9,0022 9,1367	+0,0441 0,3396 0,0515 0,1959 9,8241	7,8801 ,6246 ,8708 ,7344 ,9391
486 487 488 489 490	Doradus.	7 5.6 6.7 7 6.7	2 3 5 3 2	43 27,70 43 29,69 43 38,40 43 48,93 44 18,64	1,092 1,414 0,685 <b>2,2</b> 78 0,635	+7,9052 ,8823 ,9897 ,7347 ,9804	+9,0754 9,0252 9,1343 8,8863 9,1412	+0,0382 0,1504 9,8357 0,3575 9,8028	-7,8238 ,7737 ,9306 ,4423 ,9234
491 492 493 494 496	Equ. Pict.	7.8 7 9 6.7	5 3 6 3	44 19,11 44 28,18 44 55,48 46 25,89 46 50,38	0,635 1,670 1,739 0,637 1,902	+7,9652 ,8139 ,7893 ,9170 ,7029	+9,1413 8,9840 8,9729 9,1410 8,9464		7,9086 ,673 <i>5</i> ,6382 ,8599 ,5211

No.	Declination.	Annual		Logari	thms of	<del></del>	Diffe		he Brisbane scension	Catalogue.
110.	(South.) Jan. 1. 1840.	Precession	a'	b'	c'	d'	No.		om   T.	Deolin.
451 452 453 454 455	47 11 42,88 60 48 18,21 42 25 23,61 46 2 44,32 62 2 34,20	+2,977 2,951 2,933 2,864 2,830	+0,0086 0,0314 9,9948 0,0060 0,0322	-9,0376 9,1090 8,9944 9,0125 9,0959	+0,4741 ,4699 ,4674 ,4670 ,4617	—9,9951 ,9962 ,9963 ,9965 ,9966	977 976	<b>—</b> 2,70	- 2,62 - 2,63 - 3,38	+ 2,02 + 2,69 + 3,02 + 1,41 - 5,06
456 457 458 459 460	61 56 42,77 33 11 28,02 33 22 44,92 28 48 39,82 61 39 17,48	2,824 2,662 2,639 2,610 2,622	+0,0326 9,9566 9,9581 9,9335 0,0326	9,0946 8,8615 8,8601 8,7978 9,0612	-+0,4508 ,4252 ,4214 ,4167 ,4186	—9,9956 ,9961 ,9962 ,9963 ,9962		- 2,51 - 0,84	- 3,41 - 2,61	0,89 +13,59 +11,13 1,20
461 462 463 464 46ō	55 0 43,41 35 9 58,56 28 43 26,24 47 24 51,34 38 7 17,22	2,564 2,529 2,483 2,460 2,436	+0,0257 9,9606 9,9335 0,0107 9,9791	—9,0204 8,8614 8,7747 8,9560 8,8753	+0,4089 ,4030 ,3950 ,3909 ,3868	—9,9964 ,9965 ,9966 ,9967 ,9968	997 999	- 2,79 - 2,65 - 0,28 - 3,08 - 1,86	- 2,52 - 3,37 - 2,72	- 4,50 - 2,71 - 7,10 + 4,10 + 1,56
466 467 468 469 470	61 16 30,86 60 59 35,16 47 48 24,37 40 46 27,55 55 2 40,66	2,338 2,332 2,275 2,228 2,163	+0,0334 0,0330 0,0120 9,9903 0,0269	-9,0100 9,0076 8,9247 8,8609 8,9446	+0,3689 ,3678 ,5569 ,3479 ,3330	—9,9970 ,9970 ,9972 ,9973 ,9975	1005 1012 1013	- 0,92 - 6,15 - 4,37 - 1,52 - 3,82		- 1,00 - 0,30 - 1,16 + 2,69 - 4,37
471 472 473 474 476	61 34 57,82 61 15 17,37 54 32 31,75 45 54 33,10 45 41 39,36	2,066 2,037 1,921 1,810 1,811	+0,0338 0,0334 0,0257 0,0074 0,0069	8,9574 ,9499 ,8924 ,8121 ,8106	+0,3151 ,3090 ,2835 ,2578 ,2578	—9,9977 ,9977 ,9972 ,9982 ,9982	1021	- 2,47 - 2,04 - 4,70 - 2,64 - 3,13		$\begin{array}{c} + \ 3,97 \\ + \ 3,53 \\ + \ 0,79 \\ + \ 2,72 \\ - \ 1,45 \end{array}$
476 477 478 479 480	45 48 48,36 49 54 58,40 39 22 51,61 55 45 52,59 46 39 29,83	1,811 1,783 1,729 1,636 1,561	+0,0069 0,0174 9,9854 0,0286 0,0098	8,8115 ,8340 ,7384 ,8293 ,7516	+0,2578 ,2522 ,2379 ,2139 ,1933	—9,9982 ,9983 ,9982 ,9985 ,9987	1031 1033 1036 1042 1043	- 3,75 - 1,79 - 3,32 - 4,31 - 3,47	- 2,89 - 3,10	$\begin{array}{c c} -2,57 \\ -4,34 \\ +0,23 \\ +2,74 \\ +4,66 \end{array}$
481 482 483 484 485	55 47 13,90 33 28 45,21 55 38 25,11 41 38 51,91 60 58 41,66	1,549 1,520 1,532 1,450 1,450	+0,0290 9,9600 0,0282 0,0141 0,0342	8,8058 ,6218 ,7996 ,7380 ,8012	+0,1901 ,1819 ,1862 ,1615 ,1615	—9,9987 ,9987 ,9987 ,9989 ,9989	1044	- 3,97 - 1,65 - 5,70 +53,02 - 3,00	- 2,89 + 52,77	* + 29,19 * + 1,01 4,06
486 487 488 489 490	55 59 42,98 51 7 37,25 60 46 56,79 30 40 21,40 61 17 19,19	1,351 1,439 1,433 1,404 1,381	+0,0294 0,0208 0,0342 9,9455 0,0346	8,7474 ,7474 ,7952 ,5530 ,7811	+0,1308 ,1580 ,1562 ,1473 ,1400	—9,9990 ,9989 ,9989 ,9989	1058 1051 1054 1053 1056	+58,17 - 1,85 - 3,81 - 2,59 - 2,11	<u>- 2,37</u>	+ 3,60 + 2,89 + 12,94 - 1,49 - 0,43
491 492 493 494 495	61 17 16,34 46 22 3,68 44 55 35,41 61 15 12,30 41 8 47,98	1,334 1,351 1,311, 1,194 1,142	+0,0346 0,0090 0,0047 0,0350 9,9930	8,7662 ,6885 ,6644 ,7181 ,5740	+0,1252 ,1308 ,1175 ,0771 ,0577	9,9990 ,9990 ,9991 ,9992 ,9993	1062 1066 1061 1066 1067	+21,70 - 2,45 - 0,58 - 7,07 - 1,84		+14,74 + 4,61 + 1,20 + 8,93 + 2,18

N.	NT	Мон	No.	Right Ascen.	Annual		Logarith	uns of	
No.	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	α	b	c	d
496 497 498 499 500	y Equ. Pict.	5.6 6 5 7 8.9	3 3 5 1	11. 31. 9. 5 46 55,66 46 58,86 47 16,24 47 45,81 47 58,32	+1,075 1,309 1,351 0,689 0,676	+7,8343 ,7961 ,7785 ,8652 ,8575	+9,0779 ,0419 ,0354 ,1339 ,1357	+0,0314 0,1169 0,1307 9,8382 9,8299	-7,7539 ,6974 ,6757 ,8058 ,7987
501 502 503 504 505	Equ. Pict. Columbæ. Doradus. Equ. Pict.	7.8 8 10 7.8 8.9	5 5 3 3	48 55,44 49 2,97 49 15,34 49 29,13 49 31,89	1,587 1,892 0,613 1,051 0,497	+7,6793 ,6244 ,8179 ,7415 ,8144	+8,9978 8,9482 9,1443 9,0816 9,1600	+0,2006 0,2769 9,7875 0,0216 9,6964	7,5503 ,4447 ,7616 ,6626 ,7626
506 507 508 509 510	Equ. Pict. Columbw. Equ. Pict. Columbw. Equ. Pict.	6.7 6.7 6.7 6.7	3 3 3 3 3	49 39,61 49 58,89 50 41,37 50 51,10 51 19,13	0,998 2,248 1,497 2,234 1,316	+7,7439 ,5258 ,6162 ,4894 ,6188	+ 9,0896 8,8931 9,0123 8,8952 9,0410	+9,9991 0,3518 0,1752 0,3491 0,1193	-7,6683 ,2447 ,4982 ,2136 ,5194
511 512 513 514 515	Equ. Pict.	7 9.10 7.8 8 8	3 3 3 6	51 42,85 51 46,44 53 2,99 53 8,07 54 16,82	0,671 0,616 1,047 1,044 1,318	+7,7075 ,7014 ,5633 ,5595 ,4340	+9,1501 9,1440 9,0824 9,0828 9,0408	+9,7566 9,7896 0,0199 0,0187 0,1199	7,6528 ,6450 ,4846 ,4810 ,3344
516 517 518 519 520	Equ. Pict.	7.8 7.8 7.8 7 7	3 6 3 5	54 29,94 55 11,53 55 15,77 55 16,78 55 33,09	0,610 1,308 1,317 1,405 1,777	+7,5063 ,3635 ,3561 ,3560 ,2437	+9,3449 9,0423 9,0410 9,0274 8,9670	+9,7853 0,1166 0,1196 0,1477 0,2497	-7,4501 ,2647 ,2665 ,2280 ,0856
521 522 523 524 525		7 8 8 7	4 2 6 4		1,777 1,405 1,154 0,708 1,163	+7,2017 ,1140 ,0981 ,1391 ,0336	+8,9670 9,0270 9,0662 9,1313 9,0648	+0,2497 0,1477 0,0622 9,8800 0,0656	-7,0436 7,0059 7,0119 7,0788 6,9467
526 527 528 529 530	Equ. Pict.	8 7	2 10	58 58 33,80 58	0,875	+6,7944 7,0116 6,8740 6,6854 6,5951	+8,8835 9,1007 9,1316 9,1077 9,2313	+0,3649 9,9652 9,8488 9,9420 9,8500	-6,4845 ,9404 ,8137 ,6168 ,5347
531 532 533 536 536	Columbæ.  Rqu. Piot.	7 6 6 7	3 3 4 3	59 66,11 6 0 4,68 0 9,58	2,304 1,728 0,744	+6,4172 5,3490 5,7398 5,8910 6,0918	+9,0504 8,8853 8,9751 9,1263 9,0260	+0,0993 0,3625 0,2375 9,8716 0,1498	-6,3228 +5,0447 5,5899 5,8290 5,9829
53 53 53 58 54	8	8 6 7.8 9	4	0 38,3 <i>6</i> 0 43.34	1,560 1,302	5862	+9,0429 ,0423 ,0022 ,0433 ,1334	+0,1156 0,1169 0,1931 0,1146 9,8407	+6,1071 ,3613 ,3814 ,4879 ,7926

	Declination	Annual		Logari	thms of		Diffe		he Brisbane ascension	Catalogue.
No.	(South.) Jan. 1, 1840.	Precession	a'	b'	c'	d'	No.	l fr	om   T.	Declin.
496 497 498 499 500	56 12 31,44 52 48 42,76 52 8 51,76 60 43 17,48 60 51 6,98	+1,142 1,136 1,107 1,078 1,055	+0,0298 ,0241 ,0228 ,0342 ,0346	-8,6753 ,6548 ,6397 ,6713 ,6624	+0,0577 ,0564 ,0442 ,0326 ,0231	—9,9993 ,9993 ,9995 ,9994 ,9994	1071 1072 1074 1077 1078	— 2,51	4,10 - 2,99	+ 0,43 + 3,27 + 1,15 + 1,30 - 2,53
501 502 503 504 505	47 59 22,86 41 22 32,88 61 27 51,17 56 29 53,28 52 32 51,39	0,961 0,960 0,945 0,916 0,903	+0,0137 9,9939 0,0350 0,0302 0,0362	8,5520 ,4960 ,6168 ,5806 ,6021	+9,9830 ,9777 ,9750 ,9614 ,9558	—9,9995 ,9995 ,9995 ,9995	1080 1081 1084 1086 1087	- 3,00 - 2,15 - 3,57 - 3,27 + 1,64		+ 5,88 - 4,44 +16,34 - 5,03 + 1,19
506 507 508 509 510	67 11 15,39 31 33 35,57 49 39 23,44 32 0 1,14 52 40 22,54	0,903 0,860 0,804 0,787 0,758	+0,0314 9,9508 0,0179 9,9528 0,0245	8,6784 ,3513 ,4855 ,3182 ,4781	+9,9558 ,9343 ,9064 ,8959 ,8795	—9,9996 ,9996 ,9996 ,9997 ,9997	1088 1083 1093 1092 1095	$ \begin{array}{r} -2,69 \\ -1,09 \\ -1,82 \\ -2,74 \end{array} $	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	- 0,42 0,57 0,76 + 4,71 + 3,34
511 512 513 514 515	61 52 6,84 61 25 52,48 56 32 46,53 56 34 37,81 52 38 59,02	0,723 0,723 0,606 0,600 0,495	+0,0354 ,0364 ,0306 ,0306 ,0245	8,6024 ,5007 ,4020 ,3980 ,2934	+9,8590 ,8590 ,7826 ,7784 ,6950	—9,9997 ,9007 ,9998 ,9998 ,9999	1099 1100 1101 1103 1108	- 2,07 - 4,97 - 4,12 - 4,56 - 2,44		+ 0,15 + 3,01 - 1,42 + 1,01 + 4,39
516 517 518 619 520	61 28 2,91 52 48 12,71 52 39 63,63 61 14 4,20 44 0 45,25	0,459 0,420 0,414 0,408 0,379	+0,0354 ,0245 ,0245 ,0216 ,0030	8,3051 ,2222 ,2154 ,2007 ,1185	+9,6632 ,6229 ,6169 ,6107 ,6785	,9999 ,9999 ,9999 ,9999 ,99999	1109 1110 1111 1112 1114	- 7,22 - 3,29 - 4,31 - 4,07	- 3,48 - 2,65	+ 4,39 + 4,69 + 0,73 - 3,31 - 3,34
521 622 523 524 525	44 0 51: 13 27,27 55 5 38,21 60: 29 22,29 54 57 21,46	0,344 0,245 0,216 0,204 0,186	+0,0030 ,0216 ,0286 ,0350 ,0286	8,0765 7,9788 7,9457 7,9474 7,8820	+9,5365 ,5889 ,3338 ,3097 ,2708	-9,9999 0,0000 0,0000 0,000 ,0000	1115 1118 1119 1121 1122	- 1,99 - 8,66 - 3,65	2,74	$ \begin{array}{c}  + 0,18 \\  -12,81 \\  - 5,71 \\  - 0,62 \end{array} $
526 527 528 529 530	29 20 6,04 58 4 60 29 32,60 58 38 60 29 6,73	0,163 0,163 0,111 0,076 0,058	+9,9590 0,0326 0,0350 0,0334 0,0350	7,6010 ,8397 ,6821 ,6091 ,4033	+9,2128 9,2128 9,0444 8,8796 8,7656	-0,0000 ,0000 ,0000 ,0000	1120 1125 1125 1126 1129	$\begin{array}{c} -0.15 \\ +9.03 \\ -2.14 \end{array}$		-7,27 $+7,80$ $+0,81$
531 532 533 534 535	53 34 40,44 29 44 43,65 45 4 54,99 00 5 36,15 51 5 25,66	+0,047 -0,006 0,012 0,012 0,023	+0,0265 9,9410 0,0060 0,0346 0,0212	7,2725 +6,1594 6,6149 (6,7027 6,9569	+8,6687 7,7656 8,0667 8,0667 8,3677	-0,0000 ,0000 ,0000 ,0000	1128 1130 1132 1134 1133	- 2,47 - 4,83 - 2,82 - 3,32	- 2,49 - 2,76 	$\begin{array}{r} +\ 4,16 \\ -\ 1,10 \\ -\ 2,09 \\ +\ 1,08 \\ -\ 1,26 \end{array}$
536 537 538 539 540	52 51 52 47 6,76 48 26 43,26 52 53 1,77 60 38 10,08	0,029 0,062 0,064 0,070 0,105	+ 0,0249 ,0245 ,0154 ,0245 ,0350	+7,0642 ,3191 ,3792 ,4446 ,6593	8,4646 8,7199 8,8070 8,8448 9,0209	,0000 ,0000 ,0000 ,0000	1136 1136 1137 1138 1142	- 1,60 - 1,26 - 2,24 + 1,38		$ \begin{array}{r} -2,44 \\ +8,54 \\ -1,08 \\ -1,70 \end{array} $

No.	No mag	Man	No.	Right Ascen.	Annual		Logarit	hins of	
140'	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	6	c	d
541 542 543 544 544	Equ. Pict.	7 7 7	3 - 3	11. M. S. 6 1 1 12,14 1 39,63 1 . 2 2,71	s. +0,745 1,203 1,694 0,771 1,202	-6,8204 6,7777 6,8593 7,0012 7,0140	+9,1262 9,0587 8,9806 9,1225 9,0589	+9,8722 0,0803 0,2289 9,8870 0,0799	+6,7574 ,6878 ,7147 ,9380 ,9241
546 547 548 549 550	Columba. Equ. Pict. Columba. Can. Maj.	6.7 10 7 7.8	3 3	2 32,74 2 38,83 2 43,75 3 14,81 4	1,676 0,697 1,340 1,757 2,225	-7,0384 ,1987 ,1244 ,1331 ,1734	-+ 8,9835 9,1329 9,0375 8,9704 8,8967	+0,2159 9,8432 0,1271 0,2448 0,3473	+6,8966 7,1388 7,0227 6,9785 6,9008
551 552 563 554 555	Equ. Pict. Argus. Equ. Pict. Can. Maj. Columbæ.	7 7 8.9 6 6	3 3 3 3	4 10,16 4 41,31 4 44,61 4 48,62 4 49,04	0,583 1,867 1,201 2,404 2,140	-7,4116 ,2613 ,3679 ,2048 ,2423	+9,1484 8,9524 9,0590 8,8719 8,9093	+9,7657 0,2711 0,0705 0,3809 0,3804	+7,3564 7,0864 7,2781 6,8536 6,9986
556 557 558 559 560	Equ. Pict. Columbω, Cau. Maj. Equ. Pict. Columbω,	7.8 8 	4 3  4 3	4 49,38 5 27,65 5 6 31,42 6 56,11	1,278 2,173 2,230 1,310 2,079	-7,3742 ,2924 ,3235 ,5014 ,4079	+9,0470 8,9044 8,8959 9,0419 8,9187	+0,1065 0,5371 0,3483 0,1173 0,3178	+7,2780 ,0381 ,0491 ,4024 ,1826
561 562 563 564 565	Equ. Piet. Argus, Equ. Piet.	5.6 8 8 8 8 7.8	3 4 3 3 3	7 11,49 7 39,70 8 42,71 9 15,19 9 22,14	1,166 1,824 0,777 0,613 0,754	-7,5657 ,4876 ,7061 ,7545 ,7349	- -9,0644 8,9598 9,1216 9,1444 9,1248	+0,0667 0,2610 9,8904 9,78 <b>7</b> 5 9,8774	+7,4787 ;3212 ;6426 ;6983 ;6726
566 567 568 569 570	Columbæ. Can. Maj. Argus. Equ. Pict. Argus.	8 6 6.7 7 9	3 3 4 3 2	9 45,12 9 47,90 10 0,39 10 18,33 10 30,86	1,815 2,305 1,383 0,736 1,387	-7,5949 ,5250 ,6734 ,7817 ,6925	+8,9607 8,8849 9,0304 9,1274 9,0298	4-0,2589 0,3627 0,1408 0,8669 0,1421	+7,4302 ,2206 ,5677 ,7202 ,5863
571 572 573 574 576	Equ. Pict. Columbæ. Equ. Pict. Can. Maj.	8 7.8 7 7 6.7	3 3 7 3	10 40,94 10 41,86 10 53,84 10 56,66 11 48,30	0,737 1,818 0,618 1,023 2,268	-7,7959 ,6338 ,8607 ,7673 ,6070	+ 9,1271 8,9602 9,1437 9,0857 8,8900	+9,8675 0,2596 9,7910 0,0099 0,3556	+7,7337 ,4687 ,8044 ,6902 ,3182
576 577 578 579 580	Columbæ. Equ. Pict.	7 9 8 7	3 4 5 -4	13 16,04 14 1,33 14 2,76 14 14 6,02	1,995 0,835 1,138 0,838 0,835	—7,6969 ,8996 ,8569 ,9013 ,9038	4-8,9316 9,1132 9,0683 9,1127 9,1131	+0,2999 9,9217 0,0561 9,9232 9,9217	+7,4942 ,8334 ,7721 ,8349 ,8375
581 582 583 584 585	Argus Can. Maj.	6.7 7 6 8.9 7	6 3 3 4 3	14 20,48 14 52,52 15 53,75 16 31,46 17 15,52	1,320 1,462 1,653 1,750 2,245	-7,8370 ,8322 ,8458 ,8316 ,7707	+9,0403 9,0176 9,0030 8,9709 8,8929	+0,1206 0,1649 0,1912 0,2430 0,3512	+7,7374 ,7184 ,7214 ,6787 ,4914

	Declination.	Annual		Logari	thms of		Diffe		lie Brisbane	Catalogue,
No.	(South.) Jan. 1. 1840.	Precession	a'	<i>b'</i>	c'	d'	No.		om ! T.	Declin.
541 542 543 544 545	60 6 54 22 25,23 45 47 52,21 59 48 54 23 40,67	- 0,099 0,105 0,151 0,152 0,181	+0,0322 0,0278 0,0082 0,0342 0,0278	+7,6321 ,6290 ,7341 ,8154 ,8652	8,9061 9,0209 9,1806 9,1806 9,2570	0,000,000,000,000,000,000,000,000,000,	1141 1140 1143 1146 1148	$ \begin{array}{r} s. \\ -3,32 \\ -3,35 \\ -2,90 \end{array} $	s. — 3,39	- 3,07 - 3,28 - 2,44
546 547 548 549 550	46 11 8,04 60 35 20,05 52 18 15,50 44 27 25,18 32 16	0,227 0,233 0,216 0,291 0,379	+0,0090 0,0350 0,0237 0,0043 9,9547	+7,9130 8,0059 7,9863 8,0081 8,0040	—9,3567 ,3677 ,3889 ,4646 ,6785	0,0000 0,0000 0,0000 9,9999 9,9099	1151 1155 1152 1157 1160	- 2,84 - 1,61 - 1,37 - 3,28		- 2,04 +25,66 - 2,89 + 7,92
551 552 553 554 555	61 43 45,33 41 57 11,12 54 24 57,51 26 27 4,74 34 47 17,20	0,567 0,408 0,408 0,431 0,431	+0,0358 9,9961 0,0273 9,9206 9,9666	+8,2079 8,1339 8,2190 7,9817 8,0892	9,5650 ,6107 ,6107 ,6348 ,6348	—0,9999 9999 9999, 9999 ,9999	1162 1164 1168 1163 1167	$\begin{array}{r} -2,39 \\ -7,84 \\ -0,10 \end{array}$	<u></u>	+ 8,69 + 2,93 - 0,43 + 0,89 - 0,85
556 557 558 559 560	55 15 35,25 35 50 15,12 32 6 52 46 4,60 36 31 32,25	0,425 0,490 0,536 0,577 0,618	+0,0253 9,9624 9,9538 0,0249 9,9750	+8,2309 ,1336 ,1531 ,3603 ,2637	-9,6289 ,6899 ,7294 ,7612 ,7909		1169 1170 1171 1175 1176	- 0,06		$ \begin{array}{c} + 4,82 \\ - 1,36 \\ + 5,45 \end{array} $
561 562 563 564 565	54 56 8,37 42 58 0,28 59 46 4,87 61 27 43,54 59 1 0,56	0,635 0,677 0,770 0,815 0,816	+0,0282 9,0991 0,0338 0,0354 0,0342	+8,4141 ,3616 ,5207 ,5535 ,5473	9,8030 ,8300 ,8861 ,9116 ,9116	—9,9998 ,9997 ,9997 ,9996 ,9996	1177 1178 1180 1182 1181	$\begin{array}{r} -2,74 \\ -3,31 \\ +2,14 \\ +0,32 \\ -4,66 \end{array}$	— 3,07 ————————————————————————————————————	- 2,29 + 4,59 - 2,82 + 2,49 - 35,79
566 567 568 569 570	43 11 29,69 29 44 21,19 51 37 10,88 60 12 49,51 51 32 18,67	0,862 0,874 0,880 0,903 0,921	+0,0000 9,9415 0,0220 0,0342 0,0220	+8,4691 ,3353 ,5368 ,5924 ,5561	-9,9358 ,9416 ,9445 ,9558 ,9641	—9,9996 ,9996 ,9996 ,9996 ,9995	1184 1183 1186 1189 1188	- 1,81 + 0,85 - 2,65 + 0,88 - 4,06		$ \begin{array}{c c} -3,34 \\ +1,37 \\ +0,94 \\ +5,31 \\ +16,40 \end{array} $
571 572 573 574 575	60 11 27,74 43 7 34,78 61 26 41,04 56 52 10,80 30 57 4,80	0,933 0,944 1,043 0,961 1,043	+0,0346 0,0000 0,0350 0,0306 9,9474	+8,6061 ,5079 ,6600 ,6040 ,4276	9,9696 9,9750 0,0183 9,9830 0,0183	9,9996 ,9995 ,9994 ,9995 ,9994	1192 1190 1200 1193 1198	- 4,66 - 1,48 +58,73 - 3,00 - 2,32	+ 56,23 - 3,36	+ 7,25 +12,81 +11,18 - 0,29 - 8,46
576 577 578 579 580	38 49 53,59 59 9 3,19 55 21 19,66 59 6 59 8 23,38	1;165 1,213 1,229 1,229 1,235	+9,9279 0,0330 0,0282 0,0330 0,0330	+8,4718 ,7194 ,7029 ,7213 ,7235	9,0664 ,0876 ,0897 ,0897 ,0917	—9,9998 ,9992 ,9992 ,9992	1203 1210 1208 1211 1212	$ \begin{array}{r} -2,21 \\ -4,89 \\ -3,33 \\ \hline -1,37 \end{array} $		$ \begin{array}{c} + 2.73 \\ - 9.51 \\ - 13.01 \\ + 0.88 \end{array} $
581 582 583 584 585	52 40 12,05 50 17 42,29 48 39 29,02 44 41 10,25 31 42 39,96	1,253 1,305 1,395 1,450 1,503	+0,0237 0,0191 0,0154 0,0039 9,9508	+8,6963 ,6998 ,7173 ,7066 ,5973	-9,0978 ,1156 ,1437 ,1615 ,1785	1990,0— 1999, 9299, 0899, 8890,	1213 1215 1219 1222 1225	- 3,77 - 3,95 - 3,64 - 3,61	3,59 - 3,17 	0,74 + 3,39 0,20 7,94 + 9,10

	7.	<b>N</b> I	М	No.	Right Ascen.	Annual		Logarith	ıms of	
	No.	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	<i>b</i>	c	d
<u> </u>	586 587 688 689 590	Argus. Equ. Pict. Argus.	7 6 8 8	3 4 3 3 2	H. M. S. 6 17 53,12 18 14,18 18 18,49 18 48,95 20 0,54	s. +1,327 2,067 0,639 1,966 1,358	-7,9333 7,8264 8,0446 7,8553 7,9773	-1-9, <b>0</b> 390 8,9198 9,1406 8,9357 9,0339	+0,1229 0,3153 9,8055 0,2936 0,1329	+7,8333 -7,6042 7,9875 7,6600 7,8744
	591 592 593 594 595	Argus. Can. Maj. Argus. Equ. Pict.	7.7.8 6 6	3 4 3 3	20 20 45,02 21 16,94 21 22,65 22 16,05	1,327 2,426 1,321 0,900 0,746	-7,9822 7,8280 8,0099 8,0750 8,1157	+9,0388 8,8676 9,0397 9,1035 9,1254	+0,1229 0,3849 0,1209 9,9542 9,8727	+7,8822 7,4659 7,9106 8,0056 8,0541
	596 697 598 699	Argus. Columbæ.	7.8 8.9 8.9 7.8 7	3 3 3 3	22 33,95 23 41,36 23 61,16 23 56,58 24 1,32	1,331 1,314 1,176 1,942 1,942	8,0333 8,0573 8,0800 7,9618 7,9631	+9,0380 9,0406 9,0621 8,9390 8,9391	+0,1248 0,1186 0,0704 0,2882 0,2882	+7,9332 7,9588 7,9930 7,7723 7,7737
	601 602 603 604 606	Argus. Columba. Can. Maj. Argus.	6 6 9 6	3 4 3 3 3	24 32,88 25 29,84 25 31,64 26 47,82 26 42,15	0,951 1,940 2,133 1,113 1,044	8,1284 7,9902 7,9596 8,1248 8,1508	+9,0960 8,9392 8,9086 9,0715 9,0819	+9,9782 0,2878 0,3290 0,0465 0,0187	+8,0564 7,8014 7,7198 8,0424 8,0731
	606 607 608 609 610	Argus. Equ. Pict. Argus. Equ. Pict. Argus.	$\begin{array}{ c c } \hline 6 \\ \hline 7 \\ 6.7 \\ 6 \end{array}$	3 3 3	27 34,40 27 27 41,76 27 44,54 27 47,67	1,388 0,891 1,734 0,818 2,012	8,1125 ,1853 ,0598 ,2000 ,0153	-+9,0287 9,1046 8,9727 9,1150 8,9272	+0,1424 9,9499 0,2390 9,9127 0,3036	+8,0074 8,1167 7,9108 8,1352 7,8096
	611 612 613 614 616	Argus. Equ. Pict.	9 7 6.7 8 5.6	3 3 3 3 3	29 30,45	1,468 1,875 2,143 1,138 0,601	-8,1191 ,0577 ,0182 ,1791 ,2689	+9,0155 8,9492 8,9065 9,0676 9,1454	+0,1667 0,2730 0,3310 0,0561 9,7789	+8,0055 7,8831 7,7761 8,0953 8,2039
	616 617 618 619 620	# Equ. Pict. Argus. Equ. Pict. Argus. Equ. Pict.	6 8 8 7 6.7	7 3 3 3 3	30 28,52	0,893 1,359 0,556 1,635 0,608	-8,2176 ,1604 ,2711 ,1155 ,2809	+9,1041 9,0330 9,1617 8,9883 9,1442	+9,9508 0,1332 9,7451 0,2135 9,7839	+8,1490 8,0483 8,2179 7,9814 8,2257
:	621 622 628 624 625		5.6 6.7 7 7		31 37,22 32 28,49	1,321 1,482 1,821 1,480 2,037	-8,1802 ,1564 ,1127 ,1666 ,0812	+9,0388 9,0132 8,9676 9,0133 8,9224	+0,1209 0,1708 0,2603 0,1703 0,3090	+8,0816 8,0417 7,9491 8,0521 7,8699
	626 627 628 629 630	Equ. Pict. Argus.	8 7 7.8 -		32 50,00 32 56,47 33	1,164 0,643 1,100 1,822 1,363	-8,2227 ,2985 ,2343 ,1266 ,2012	+9,0632 9,1389 9,0729 8,9673 9,0320	+0,0659 9,8082 0,0414 0,2605 0,1345	+8,1373 8,2418 8,1534 7,9630 8,0990

	Doclination	Annual		Logarit	lims of		Differ	Right A	e Brisbane scension	
No.	(South.) Jan. 1. 1840.	Precession	a'	$b^{j}$	ć' ,	d'	No.	M. C.	om T.	Declin.
586 587 588 589 590	52 35 7,99 36 55 57,85 61 15 28,95 39 37 13,86 52 5 43,83	1,567 1,607 1,601 1,660 1,752	+0,0237 9,9759 0,0346 9,9863 0,0224	+8,7930 ,6830 ,8455 ,7227 ,8389	-0,1949 ,2061 ,2045 ,2200 ,2437	—9,9987 ,9986 ,9986 ,9985 ,9983	1226 1227 1231 1232 1238	$ \begin{array}{r} s. \\ -3,33 \\ -1,16 \\ -3,11 \end{array} $	3. 	- 1,73 + 7,30 - 0,49 + 3,10 + 3,40
591 592 593 594 595	52 34 25 45 13,46 52 42 58,25 58 27 24,08 60 11 35,25	1,752 1,822 1,863 1,869 1,050	+0,0232 9,9150 0,0232 0,0298 0,0326	+8,8418 ,5966 ,8690 ,9002 ,9266	0,2437 ,2606 ,2702 ,2715 ,2901	-9,9983 ,9982 ,9981 ,9981 ,0979	1239 1242 1244 1246 1248	- 2,14 - 2,78 - 2,34		+ 0,32 + 4,98 + 0,90 + 1,96
596 597 598 599 600	52 33 35,13 52 50 23,04 54 56 12,44 40 16 15,37 40 16 39,83	1,973 2,072 2,077 2,101 2,106	+0,0228 0,0232 0,0269 9,9881 9,9886	+8,8931 ,9159 ,9285 ,8309 ,8322	-0,2951 ,3163 ,3175 ,3223 ,3235	—9,9979 ,9977 ,9976 ,9976 ,9976	1250 1253 1255 1254 1256	- 3,67 - 3,59 - 7,57 - 1,80 - 2,03		+ 3,03 + 10,81 - 0,56 - 3,08 - 2,74
601 602 603 604 605	57 54 2,83 40 20 24,10 35 8 59,54 55 48 43,68 56 44 40,91	2,146 2,240 2,240 2,261 2,332	+ 0,0306 9,0886 9,9671 0,0278 0,0286	+8,9579 ,8595 ,8085 ,9681 ,9882	0,3318 ,3502 ,3502 ,3524 ,3678	—9,9975 ,9973 ,9973 ,9972 ,9970	1260 1263 1264 1266 1273	- 0,97 - 4,58 - 2,24 - 3,59 - 2,39	$ \begin{array}{c c} - 3,07 \\ - 4,69 \\ \hline - 3,12 \end{array} $	+ 1,58 0,63 1,64 + 1,66 + 1,41
606 607 608 609 610	58 38 46 11 36,64 59 28 43,40	2,413 2,396 2,481 2,419 2,437	+0,0204 0,0310 0,0043 0,0314 9,9809	+8,9756 9,0090 8,9348 9,0170 8,8792	-0,3826 ,3795 ,3858 ,3837 ,3868	—9,9968 ,9969 ,9968 ,9968 ,9968	1276 1277 1284 1279 1278	- 1,80 - 1,45 - 1,84	- 2,82 - 2,47	$\begin{array}{r} + 3,22 \\ + 4,65 \\ - 2,14 \\ + 1,19 \end{array}$
611 612 613 614 615	41 58 25,07 34 55 32,94 55 31 30,28	2,552 2,570 2,570	+0,0174 9,9939 9,9657 0,0269 0,0330	+8,9865 8,9304 8,8659 9,0241 9,0540	0,4020 ,4069 ,4099 ,4099 ,4118	9,9966 ,9964 ,9964 ,9964 ,9964	1286 1258 1287 1290 1293	$\frac{-2,59}{-5,09}$		+ 3,31 + 2,93 + 2,67 - 4,66 + 3,78
616 617 618 618 620	7   52 12 31,11 8   62 13 11,25 0   47 14 64,99	2,604 2,616 2,662	+0,0306 ,0212 ,0330 ,0099 ,0326	+9,0414 9,0116 9,0625 8,9892 9,0774	-0,4118 ,4157 ,4176 ,4252 ,4345	9,9964 ,9963 ,9963 ,9961 ,9960	1292 1294 1295 1297 1501	-0,93 $-2,87$	- 2,85 - 2,07	+ 5,70 - 4,01 + 1,44 + 6,65 + 8,02
62 62 62 62 62	2   50 10 3,77 3   43 19 65,66 4   50 11 47,9	7   2,760 6   2,835	+0,0216 0,0166 9,9978 0,0166 9,9768	9,0344	-0,4391 ,4410 ,4526 ,4508 ,4561	9,9959 ,9958 ,0956 ,9956 ,9955	1309	$ \begin{array}{c c} - 2,15 \\ - 3,33 \\ - 2,72 \end{array} $		+ 4,17 - 4,59 - 7,14 + 2,24
62 62 62 63	7 61 22 0,0 8 56 5 43,1 9 43 18 58,4	2,864 4 2,876 4 2,928	0,0326 0,0265 9,9978	,0984 ,0759 ,0009	,4570 ,4587 ,4665	,99 <i>5</i> 5 ,99 <i>5</i> 5 ,9953	1299 1313 131 <i>8</i>	$\begin{vmatrix} -0.54 \\ -2.71 \end{vmatrix}$	.	$ \begin{array}{c cccc} + & 0.11 \\ + & 5.12 \\ - & 2.70 \\ - & 2.80 \\ + & 0.20 \end{array} $

No.	Names,	Ma	g No. Obs				Loga	rithms of	
<u> </u>	1	<u> </u>			Precesn.	a	1 6	c	d
631 632 633 634 635		8 7 8 7 6.7	3 3 2 3 4	n. m. s. 6 83 34,78 83 45,85 34 21,09 34 29,68 34 34,55	s + 1,626 1,000 1,597 1,166 1,824	-8,1759 ,2599 ,1747 ,2441 ,1399	9,0880 8,9942 9,0627	,0000 ,2033 ,0667	+ 8,0563 8,1855 8,0463 8,1586 7,9759
636 637 638 639 640		7 7 6 7.8 7	3 3	34 50,70 34 54,80 36 1,70 36 5,15 36 15,66	1,328 1,825 1,953 1,955 1,298	8,2230 ,1439 ,1368 ,1373 ,2458	+9,0374 8,9566 8,9355 8,9352 9,0420	+0,1232 ,2613 ,2907	+8,1242 7,9798 7,9467 7,9467 8,1498
641 642 643 644 645	Equ. Pict. Argus	6.7 6.7 7 8 8	3 4 2 3 4	36 17,33 36 26,69 36 28,91 36 34,78 37 38,16	0,650 1,629 1,627 0,899 2,007	8,3507 ,1948 ,1962 ,3098 ,1477	+9,1381 8,9885 8,9890 9,1027 8,9265	+9,8129 0,2119 0,2114 9,9538 0,3025	+8,2942 8,0623 8,0630 8,2414 7,9450
646 647 648 649 660	Argus	7.8 7 7.8 7.8 7.8	4 3 4 3 3	38 2,03 38 51,72 39 43,77 39 50,46 39 54,75	0,877 1,482 1,191 1,127 2,088	-8,3302 ,2466 ,3025 ,3131 ,1601	+9,1058 9,0123 9,0584 9,0682 8,9131	+9,9430 0,1708 0,0759 0,0519 0,3197	+8,2632 8,1328 8,2167 8,2310 7,9364
651 652 653 654 655	Equ. Pict. Argus  Equ. Pict.	8 7 6.7 7.8 7.8	3 4 5 3	40 36,08 40 44,92 40 45,68 40 45,87 40 47,85	0,687 1,989 1,655 1,673 0,636	-8,3865 ,1847 ,2595 ,2366 ,3948	+9,1326 8,9288 8,9837 8,9808 9,1397	+9,8370 0,2986 0,2188 0,2235 9,8034	+ 8,3277 7,9871 8,1041 8,0986 8,3391
656 657 658 659 660	Argus Can. Maj. Argus	6.7 6.7 7.8 8 6	4 3 3 5 3	40 55,16 40 67,86 41 5,91 41 10,12 42 14,55	1,220 1,223 2,097 2,357 1,372	8,3102 ,3106 ,1715 ,1334 ,3010	+9,0537 9,0533 8,9112 8,8725 9,0295	+0,0864 ,0878 ,3217 ,3724 ,1373	+8,2213 8,2215 7,9452 7,8106 8,1900
661 662 663 664 665	Argus Equi. Piet. Argus	6.7 8 6.7 7	2 3 3 5	42 24,04 42 42,84 42 54,16 43 16,13 43 26,62	1,620 1,986 0,693 1,654 1,226	-8,2606 ,2059 ,4093 ,2653 ,3357	+ 8,9877 8,9287 9,1316 8,9834 9,0524	+0,2119 0,2980 9,8407 0,2185 0,0885	+8,1290 ,0094 ,3514 ,1303 ,2465
666 667 668 669 670	Argus Can. Maj. Argus	7 7 7 6. 8	3 3 3 4	43 27,34 43 42,43 43 52,20 44 11,90 44 24,45	1,817 2,395 1,817 1,170 1,224	-8,2403 ,1540 ,2449 ,3525 ,3460	+8,9564 8,8667 8,9563 9,0612 9,0526	+0,2593 ,3793 ,2593 ,0682 ,0878	+8,0792 7,8135 8,0838 8,2678 8,2671
67   672 673 674 675	Argus	6 8.9 7.8 7 7.8	4 4 3 3 3	45 24,21 45 30,29 45 34,85 46 3,79 46 4,74	1,690 1,027 1,013 1,888 0,950	8,2804 ,3868 ,3894 ,2645 ,4040	+8,9771 9,0829 9,0848 8,9441 9,0943	+0,2279 0,0116 0,0056 0,2760 9,9777	+8,1406 ,3119 ,3153 ,0801 ,3338

N.	Declination.	Annual		Logar	ithms of	····-	Differ		the Brisbane	Catalogue.
No.	(South.) Jan. 1. 1840.	Precession	a'	b'	· c'		No.	fr M. C.	Ascension om ! T,	Declin,
631 632 633 634 635	49 23 28,91 57 24 19,83 48 4 31,81 55 12 21,41 43 17 0,29	2,934 2,945 3,003 3,008 3,020	+9,9908 0,0282 0,0111 0,0249 9,9974	+9,0458 ,0928 ,0472 ,0909 ,0141	-0,4674 ,4691 ,4776 ,4783 ,4800	-9,9953 ,9953 ,9951 ,9960 ,9960	1319 1320 1324	s. - 2,72 - 2,03 - 1,81 - 1,88 - 2,74	5.	- 1,71 + 2,82 + 5,01 - 2,65 + 0,34
636 637 638 639 640	52 47 27,79 43 15 30,81 40 12 5,28 40 8 36,91 53 18 12,10	3,037 3,049 3,147 3,152 3,164	+0,0208 9,9969 9,9859 9,9863 0,0216	+9,0817 ,0181 ,0058 ,0061 ,1023	-0,4825 ,4841 ,4978 ,4986 ,5002	9,9949 ,9949 ,9946 ,9946 ,9945	1925 1328 1329	- 3,34 - 2,97 - 2,60 - 4,07 - 2,32		+ 5,86 - 1,53 - 6,97 + 5,64 + 1,63
641 642 643 644 645	61 23 52,72 47 28 20,47 47 31 26,19 58 41 18,96 38 48 29,49	3,227 3,181 3,181 3,187 3,291	+0,0314 0,0090 0,0090 0,0286 9,9805	+9,1504 ,0682 ,0685 ,1331 ,0126	-0,6088 ,5026 ,5026 ,5034 ,6173	—9,9943 ,9945 ,9945 ,9944 ,9941	1331 1332 1334	- 2,63 - 3,09 - 3,34 - 1,07 - 0,02		+ 3,64 1,68 0,46 + 2,06 + 7,44
646 647 648 649 650	58 58 17,76 50 17 42,62 54 57 25,68 55 51 25,52 36 41 3,05	3,313 3,388 3,463 3,469 3,486	+0,0290 0,0149 0,0232 0,0245 9,9713	+9,1513 ,1142 ,1507 ,1561 ,0166	-0,5203 ,5300 ,5394 ,5401 ,5423	-9,9940 ,9937 ,9934 ,9934 ,9933	1346 1343 1344	- 2,88 - 1,46 - 0,88 - 1,33 - 0,13		- 6,57 - 2,37 - 6,91 - 0,41 - 5,99
651 652 653 654 655	61 4 16,57 39 22 21,59 47 3 22,38 46 41 12,33 61 35 41,83	3,531 3,655 3,555 3,565 3,549	+0,0302 9,9818 0,0065 0,0060 0,0302	+9,1882 ,0513 ,1135 ,1109 ,1925	-0,5480 ,5508 ,5508 ,5508 ,5501	-9,9931 ,9931 ,9031 ,9031 ,9931	1346 1349 1348	- 3,71 1,12 2,76 3,16 2,38		+ 3,32 - 0,49 + 6,32 + 7,26 + 0,37
656 657 658 669 660	64 34 2,58 64 31 63,69 36 25 37,32 28 23 12,38 52 14 23,71	3,560 3,566 3,589 3,595 3,681	+0,0228 -0,0224 -9,9705 -0,9289 -0,0183	+9,1606 9,1611 9,0268 8,9310 9,1620	-0,5516 ,6522 ,5550 ,6557 ,6659	—9,9930 ,9930 ,9929 ,9929 ,9925	1354 1351 1353	- 3,78 - 3,92 - 3,14 - 0,82 - 2,01		- 2,55 + 0,46 - 3,80 + 8,44 -11,94
661 662 663 664 665	47 37 55,47 39 30 52,48 61 3 18,62 47 7 26,33 64 31 19,74	3,692 3,727 3,732 3,767 3,778	+0,0077 9,9823 0,0290 0,0065 0,0320	+9,1338 ,0729 ,2122 ,1391 ,1862	-0,5673 ,6713 ,6722 ,5760 ,5773	-9,9926 ,9924 ,9923 ,9922 ,9921	1362   -   1365   -   1366   -	- 1,05 - 4,58 - 2,18 - 3,41 - 2,28		+ 7,18 -64,46 + 2,38 + 1,58 - 3,61
666 667 668 669 670	43 37 27,99 27 9 11,82 43 37 19,31 55 21 54,82 64 34 29,16	3,784 ( 3,813 : 3,824   3,847   3,864	+9,9961 9,9212 9,9961 0,0224 0,0216	+9,1140 8,9388 9,1195 9,1985 9,1963	-0,5779 ,5812 ,5825 ,5851 ,5870	-9,9921 ,9920 ,9919 ,9918 ,9918	1369    1372 -   1376 -	- 1,70 - 1,85 - 1,05 - 2,73 - 2,55	-3,17 -3,15 -4,64	+ 2,45 - 0,64 + 6,57 - 3,65 + 1,31
671 672 673 674 675	46 26 49,25 57 18 9,38 67 28 35,01 42 1 1,90 58 17 2,76	3,950 3,956 3,961 4,013 4,007	+0,0048 0,0249 0,0249 9,9903 0,0257	+9,1549 ,2201 ,2219 ,1272 ,2306	0,5966 ,5972 ,5978 ,6034 ,6028	-9,9914 ,9914 ,9913 ,9911 ,9911	1381  - 1384  -	- 1,93 - 0,96 - 2,74 - 2,31 - 2,34		+10,56 +-4,86 +-1,49 +-0,49 +-0,50

No.	Names	Mag.	No.	Right Ascen.	Annual		Logari	thms of	·
	Tranes,	mag.	Obs.	Jan. 1, 1840.	Precesn.	a	1 6	c	"
676 677 678 679 680	Argus B Argus a Equ. Pict. Argus ——	8 5 4 7.8 7	3 3 4 4 3	n. m. s. 6 46 10,39 46 22,40 46 32,59 46 59,04 47 17,77	+ 2,044 1,303 0,629 1,148 1,558	-8,2297 ,3530 ,4538 ,3828 ,3205	-1- 8,9187 9,0400 9,1402 9,0641 8,9986	+0,3105 0,1149 9,7986 0,0599 0,1926	+8,0194 ,2579 ,3989 ,3000 ,1990
681 682 683 684 686	Argus	7 7.8 — 7.8 6.7	3 4 3	47 39,20 48 0,02 48 48 59,57 49 23,18	1,878 1,874 2,071 0,968 1,278	8,2705 ,2748 ,2457 ,4286 ,3838	+8,9455 8,9460 8,9139 9,0913 9,0435	+0,2737 0,2728 0,3162 9,9869 0,1065	+8,0987 ,1038 ,0288 ,3576 ,2012
686 687 688 689 690	Argus	7 6.7 6.7 7.8	3 3 3 3 3	49 41,15 49 43,85 50 4,92 50 25,54 50 48,89	2,035 2,201 1,489 0,885 2,075	8,2632 ,2331 ,3563 ,4533 ,2666	-}-8,9192 8,8885 9,0093 9,1083 8,9126	+0,3085 0,3426 0,1729 9,9469 0,3170	+8,0501 7,9808 8,2432 8,38 <b>70</b> 8,0492
691 692 693 694 696	Argus	7 7 9,10 8 8	3 3 2 3 4	51 1,13 51 36,06 51 37,80 51 39,81 51 40,38	2,160 2,098 0,825 1,205 0,841	-8,2567 ,2696 ,4725 ,4152 ,4701	+-8,9004 8,9086 9,1121 9,0547 9,1097	4-0,3324 0,3218 9,9164 0,0810 9,9248	+8,0168 ,0459 ,4095 ,3288 ,4063
696 697 698 699 700	Argus	6 7 6.7 8 7.8	4 3 3 4	52 0,72 52 38,50 52 50,88 52 51,23 53 0,77	1,596 1,830 1,472 1,487 1,083	-8,3565 ,3220 ,3830 ,3805 ,4458	-J-8,9915 8,9523 9,0116 9,0092 9,0733	-1-0,2030 ,2624 ,1670 ,1723 ,0346	+8,2311 ,1605 ,2794 ,2683 ,3683
701 702 703 704 705	Argus	7.8 7 6.7 9 6.7	3 3 3 6 3	53 50,95 54 21,56 54 38,23 55 25,13 55 32,91	1,224 1,150 1,948 0,761 1,180	8,4306 ,4466 ,3193 ,5127 ,4516	+9,0514 9,0629 8,9328 9,1208 9,0581	+0,0878 0,0607 0,2896 9,8814 0,0719	+8,8431 ,3646 ,1845 ,4530 ,3677
706 707 708 709 710	Argus	6.7 8 6.7 7 6.7	3 4 5 3 4	55 36,46 56 34,24 55 50,43 56 10,52 56 34,01	1,132 0,739 1,957 1,581 1,954	8,4595 ,5169 ,3276 ,3919 ,3328	+9,0655 9,1239 8,9303 8,9930 8,9306	+0,0538 9,8686 0,2916 0,1989 0,2909	+8,3790 ,4682 ,1409 ,2692 ,1469
711 712 718 714 715	Argus	8 7 6.7 7 7	6 3 3 4 3	56 34,59 57 6,00 57 16,29 57 18,72 58 4,47	0,742 0,767 1,512 1,885 1,616	8,5246 ,5251 ,4118 ,3409 ,4172	+9,1234 9,1197 9,0044 8,9419 9,0035	+9,8692 9,8848 0,1795 0,2753 0,1807	+8,4658 ,4663 ,2976 ,1789 ,3027
716 717 718 719 720	Argus	8 6.7 8 7.8 7.8	4 4 3 4 4	58 15,07 58 36,21 58 40,41 58 44,67 58 59,06	0,769 0,939 1,300 0,743 1,208	-8,5341 ,5122 ,4564 ,5406 ,4730	+9,1194 ,0943 ,0386 ,1228 ,0531	+9,8859 9,9 <b>727</b> 0,1139 9,8710 0,0821	+8,4745 ,4440 ,3634 ,4821 ,3876

No.	Declination.	Annual		Logari	thms of				he Brisbane scension	Catalogue.
140,	(South.) Jan. 1. 1840.	Precession	a'	<i>b'</i>	c'	d'	No.		om   <b>T.</b>	Declin.
676 677 678 679 680	38 1 33,29 53 26 11,83 61 46 11,22 55 42 58,86 49 6 9,82	4,018 4,036 4,041 4,087 4,115	+9,9769 0,0191 0,0286 0,0224 0,0103	+9,0918 ,2089 ,2496 ,2267 ,1910	0,6040 ,6059 ,6065 ,6114 ,6144	—9,9911 ,9910 ,9910 ,9908 ,9906		5. - 1,28 - 1,34 - 1,17 - 1,86 - 0,57	8.	+ 2,83 + 2,01 + 8,09 + 8,76 + 1,34
681 682 683 684 685	42 18 37,62 42 25 57,69 37 21 58 8 1,22 53 53 33,87	4,114 4,178 4,207 4,258 4,286	+9,9912 9,9912 9,9722 0,0249 0,0191	+9,1436 ,1481 ,1051 ,2663 ,2876	0,6174 ,6210 ,6239 ,6292 ,6321	9,9905 ,9903 ,9902 ,9900 ,9898	1397 1398	$ \begin{array}{r} -2,04 \\ -1,64 \\ -2,83 \\ -3,84 \end{array} $		- 0,48 + 2,50 + 6,77 + 5,37
686 687 688 689 690	38 21 12,04 33 36 11,22 50 25 16,58 59 8 36,28 37 18 58,35	4,321 4,326 4,349 4,377 4,417	+9,9759 9,9552 0,0120 0,0251 9,9717	+9,1265 ,0774 ,2235 ,2731 ,1259	-0,6355 ,6361 ,6884 ,6412 ,6452	—9,9897 ,9896 ,989 , ,9894 ,9892	1402 1403 1406 1408 1409	- 1,65 - 1,16 - 2,30 - 2,68 - 2,36	<u>-</u> 3,00	+ 3,31 + 3,96 + 3,74 + 0,58 + 4,51
691 692 693 694 695	35 8 6,66 36 40 39,45 59 51 23,88 55 2 51,75 59 40 42,88	4,440 4,485 4,480 4,480 4,480	+9,9624 9,9685 0,0257 0,0204 0,0263	+9,1055 ,1261 ,2863 ,2630 ,2855	0,6474 ,6518 ,6513 ,6513 ,6513	1 089,0 8889, 9889, 9889, 0880,	1411 1413 1416 1414 1417	- 2,18 - 1,44 - 1,33 - 2,91 - 1,67	- 2,58 - 2,84 	- 3,66 + 1,61 - 3,15 + 3,34 - 7,30
696 697 698 699 700	48 30 43,61 43 34 30,77 50 48 17,45 50 32 45 27 56 45 35,94	4,514 4,625 4,688 4,588 4,599	+0,0073 9,9934 0,0120 0,0120 0,0220	+9,2283 ,1965 ,2490 ,2474 ,2832	-0,6556 ,6600 ,6616 ,6616 ,6527	—9,9887 ,9886 ,9883 ,9883 ,9883	1418 1422 1424 1423 1425	2,95 1,00	- 2,31 - 2,66	+ 5,85 + 2,46 + 1,95 - 3,60 + 6,77
701 702 703 704 705	54 50 5,56 55 63 16,08 40 47 4,44 60 38 7,53 55 30 22,10	4,667 4,712 4,746 4,797 4,814	+0,0191 0,0204 9,9836 0,0249 0,0195	+9,2796 ,2894 ,1896 ,3194 ,2967		—9,9879 ,9876 ,9875 ,9872 ,9871	1429 1433 [434 1438 1439	- 2,54 - 3,21 - 2,26 - 3,50 - 1,75		+ 1,12 + 0,14 + 1,07 + 10,72 + 0,57
706 707 708 709 710	56 10 22,96 60 52 36,94 40 34 13,76 48 54 30,80 40 40 12,91	4,820 4,809 4,854 4,871 4,905	+0,0199 0,0249 9,9827 0,0069 9,9827	+9,3006 ,3214 ,1974 ,2629 ,2029	-0,6830 ,6820 ,6861 ,6876 ,6906		1441 1443	2,09 63,40 + 3,94 1,92 3,70		+ 4,07 - 1,38 + 4,88 + 7,79 - 0,90
711 712 713 714 715	60 52 38,74 60 37 7,45 50 14 24,01 42 24 9,91 50 11 57,84	4,888 4,939 4,961 4,967 5,029	+0,0245 0,0245 0,0094 9,9881 0,0094	+9,3290 ,3320 ,2795 ,2232 ,2861	-0,6891 ,6936 ,6956 ,6961 ,7015	-9,9866 ,9864 ,9863 ,9862 ,9859	1450 1455 1456 1454 1458	- 6,94 - 4,47 - 2,90 - 1,47 - 2,03		+ 0,40 + 3,11 5,52 + 6,11 4,41
716 717 718 719 720	60 38 8,19 58 42 54,44 53 49 45,08 60 54 47,47 55 12 34,48	5,040 5,074 5,074 5,074 5,074	+0,0241 ,0220 ,0158 ,0237 ,0174	+9,3409 ,3353 ,3105 ,3449 ,3199	0,7025 ,7054 ,7054 ,7054 ,7073	-9,9858 ,9866 ,9856 ,9856 ,9855	1459 1461 1460 1463 1466	- 2,68 - 1,97 - 4,37 - 4,51 - 6,43		+ 1,76 + 10,55 + 4,11 - 2,81 - 9,24

No.	Names.	Mag.	No.		Annual		Logar	ithms of	
		In ag.	Оъя,	Jan. 1, 1840,	Precesn.	а	b	c	d
721 722 723 724 726	H Argus	6 6,7 8 6.7 9.10	4 3 3 5 5	H. M. S. 6 59 44,14 7 0 17,18 0 21,29 0 32,57 0 46,19	s. +1,564 1,970 1,176 2,055 0,758	-8,4218 ,3581 ,4890 ,3459 ,5542	+8,9952 8,9271 9,0579 8,9129 9,1206	+0,1942 0,2945 0,0704 0,3128 9,8797	4-8,3019 ,1699 ,4061 ,1567 ,4963
726 727 728 729 730	Argus	6 6 7 7.8 8	3 3 4 3 2	0 47,45 1 18,34 1 24,38 1 55,31 2 1,32	0,927 1,120 1,861 1,978 1,304	8,5300 ,5045 ,3861 ,3681 ,4813	4- 9,0960 9,0665 8,9466 8,9265 9,0372	4-9,9671 0,0492 0,2674 0,2962 0,1163	+8,4629 ,4257 ,2228 ,1789 ,3886
731 732 733 734 736	Argus P	8.9 7.8  7.8 7	တက္က ၂ တက	2 38,88 3 5,92 3 9,37 3 29,77	0,788 0,850 0,400 0,749 1,438	8,5634 ,5582 ,6204 ,5738 ,4683	+9,1161 ,1009 ,1696 ,1216 ,0152	+9,8965 9,0294 9,0021 9,0042 0,1578	4-8,6034 ,4963 ,6740 ,5168
736 737 738 739 740	Argus	8 7 7 6.7 8	4 3 3 3 3	3 31,56 3 40,74 4 15,70 4 53,90 5 0,67	0,733 1,426 0,867 0,893 1,988	-8,5765 ,4728 ,5642 ,5645 ,3882	+9,1238 9,0172 9,1043 9,1003 8,9226	F9,8651 0,1538 9,9380 9,9508 0,2084	4-8,5180 ,8691 ,6006 ,4996 ,1973
741 742 743 744 745	Argus	6.7 6 6.7 7.8 7.8	3 3 3 2	5 12,10 5 53,91 5 56,67 6 8,35 6 11,39	1,088 2,312 2,036 1,162 1,162	8,5387 ,3426 ,3863 ,5321 ,6321	+9,0708 8,8705 8,9142 9,0591 9,0591	+0,0006 ,3640 ,3088 ,0052 ,0052	+8,4627 ,0587 ,1837 ,4512 ,4512
746 747 748 749 750	Argus	8.9 6 7.8 6.7 6.7	4 3 3 3 3	6 43,87 6 45,01 6 50,99 7 10,08 7 11,76	1,163 2,129 0,822 1,218 0,840	—8,5355 ,3764 ,5886 ,5299 ,5872	+9,0588 8,8988 9,1106 9,0500 9,1078	+0,0656 0,3282 9,9149 0,0856 9,9243	-l-8,4546 ,1485 ,5276 ,4450 ,5263
751 752 753 754 766	I Argus	4.5 7 7 - 8	2 3 4 -	8 0,17 8 26,48 8 4 <b>0</b> ,19 9 9 47,18	1,721 2,320 2,000 0,711 0,897	8,4524 ,3586 ,4101 ,6222 ,5965	+8,9667 8,8683 8,9194 9,1266 9,0991	+0.2358 0,3655 0,3010 9,8519 9,9528	+8,3130 ,0628 ,2176 ,5004 ,6321
756 757 758 759 760	Argus	6.7 5.6 7.8 7	3 4 3 4	10 4,05 10 10,70 10 28,11 11 38,96 11 58,06	1,361 1,722 0,760 1,728 2,048	8,5274 ,4665 ,6213 ,4745 ,4222	+9,0278 8,9660 9,1190 8,9645 8,9100	+0,1307 0,2360 9,8808 0,2375 0,3113	+8,4321 ,3277 ,5636 ,3351 ,2188
762 763 764 766	Can. Maj. Argus	7 7 7 7	3 3 4	11 58,31 12 12 19,01 12 22,19 12 37,48	2,053 1,633 0,796 2,320 1,336	8,4219 ,5126 ,6275 ,3817 ,5465	+8,9093 8,9974 9,1136 8,8665 9,0300	+0,3124 0 1855 9,9099 0,3655 0,1258	+8,2173 ,3993 ,5685 ,0874 ,4532

]	Declination	Annual		Logari	thms of		Differ		e Brisbane C	atalogue.
No.	(South.) Jan. 1. 1840.	Procession	a'	b'	c'	d'	No.		om T	Declin.
721 722 723 724 725	9 21 8,35 40 24 7,18 55 42 43,93 38 8 23,16 60 49 31,33	5,170 5,221 5,221 5,243 5,249	+0,0069 9,9805 0,0179 9,9717 0,0228	+9,2918 ,2276 ,3329 ,2085 ,3593	0,7135 ,7177 ,7177 ,7196 ,7201	9,9850 ,9847 ,9847 ,9846 ,9846	1467 1469 1471 1470 1474	$ \begin{array}{r} s. \\ -2,90 \\ -1,66 \\ -3,86 \\ -2,20 \\ -4,84 \end{array} $	5.	+ 7,85 - 2,42 - 0,50 - 1,71 + 11,50
726 727 728 729 730	58 56 25,81 56 30 29,08 43 21 55,65 40 17 26,10 53 52 30,58	5,254 5,300 5,316 5,350 5,357	+0,0216 0,0183 9,9899 9,9791 0,0145	+9,3514 ,3435 ,2604 ,2373 ,3351	0,7205 ,7212 ,7256 ,7284 ,7297	—9,9845 ,9843 ,9841 ,9839 ,9838	1475 1477 1476 1482 1480	- 2,36 - 1,01 - 3,56 +59,30 - 0,51	-4,56 	- 0,25 + 5,92 + 8,42 - 0,89 - 8,39
731 732 733 734 735	60 33 41,10 59 54 39,13 64 14 60 58 49,41 51 43 9,16	5,406 5,451 5,445 5,462 5,474	+0,0216 ,0212 ,0232 ,0216 ,0103	+9,3710 ,3717 ,3887 ,3773 ,3313	-0,7329 ,7365 ,7360 ,7374 ,7383	9,9836 ,9833 ,9833 ,9832 ,9832	1481 1485 1487 1490 1488	- 7,38 - 3,46 - 3,86 - 3,16		+ 6,34 - 5,45 +13,10 + 3,09
786 787 788 789 740	61 9 23,90 61 57 16,29 69 44 44,63 69 27 47,71 40 6 35,47	5,468 5,501 5,559 5,602 5,621	+0,0220 0,0103 0,0208 0,0190 9,9777	.+9,3784 ,3349 ,3790 ,3816 ,2569	-0,7378 ,7405 ,7444 ,7484 ,7497	9,9832 ,9830 ,9827 ,9823 ,9822	1491 1492 1494 1496 1495	$\begin{array}{r} -13,57 \\ -2,19 \\ -0,40 \\ -2,68 \\ -2,32 \end{array}$		+ 8,41 + 0,22 - 3,03 - 0,15 + 2,23
741 742 743 744 745	57 4 36,20 30 33 29,61 38 50 26,84 56 6 3,14 56 6 29,75	5,647 5,698 5,698 5,709 5,709	+0,0174 9,9350 9,9727 0,0166 0,0162	.+9,3739 ,1599 ,2512 ,3737 ,3737	0,7518 ,7557 ,7557 ,7565 ,7565	—9,9820 ,9817 ,9817 ,9816 ,9816	1497 1498 1499 1500 1501	- 0,31 - 1,49 - 3,30 - 1,54 - 3,94		+ 1,35 - 7,53 + 2,13 - 5,16 -64,64
746 747 748 749 760	56 6 36,61 36 16 40,90 60 19 3,99 55 19 27,77 60 7 18,27	5,754 5,765 5,770 5,793 5,787	+0,0158 9,9661 0,0109 0,0145 0,0195	+9,3771 ,2411 ,3983 ,3761 ,3986	0,7590 ,7608 ,7612 ,7629 ,7624	-9,9813 ,9812 ,9812 ,9811	1503 1502 1505 1507 1508	- 5,05 - 1,56 - 2,66 - 2,19 - 4,39		+22,06 $+1,08$ $+3,95$ $-1,09$ $+1,24$
751 752 753 754 755	46 29 40,43 30 23 1,95 39 55 22,39 61 36 59 34 3,86	5,865 5,921 5,926 5,988 6,010	+9,9969 9,9330 9,9759 0,0189 0,0183	+9,3269 ,1746 ,2783 ,4197 ,4126	—0,7683 ,7724 ,7728 ,7773 ,7789	—9,9806 ,9802 ,9801 ,9797 ,9795	1512 1518 1519 1531 1525	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- 0,34	+ 3,84 - 0,48 + 2,42 + 3,44
756 757 758 759 760	53 23 32,46 46 34 18,52 61 6 23,71 46 29 34,25 38 44 20,25	6,038 6,049 6,071 6,170 6,199	+ 0,0103 9,9956 0,0183 9,9052 9,9699	-+9,3836 ,3409 ,4236 ,3490 ,2869	-0,7809 ,7817 ,7832 ,7903 ,7923	9,9793 ,9793 ,9791 ,9784 ,9782	1527- 1528 1532 1538 1539			+ 4,91 + 5,94 + 3,00 + 3,44 + 7,05
761 762 763 764 765	38 37 45,81 50 22 60 47 23,94 30 30 41,21 53 45 27,10	6,204 6,237 6,221 6,237 6,255	+9,9699 0,0039 0,0179 9,9325 0,0094	+9,2162 ,3799 ,4329 ,1988 ,4009	-0,7927 ,7950 ,7933 ,7950 ,7962	9,9781 ,9779 ,9780 ,9779	1540 1543 1545 1542 1547		-1,13	J-17.16

31	1	M	No.	Right Ascen.	Annual		Logari	thms of	
No.	Names,	Mag.	Obs.	Jan. 1, 1840.	Preceso.	а	b	c	
766 767 768 769 770	Argus	7.8 7 7 7.8 6.7	4 3 4 3 3	н. м. s. 7 12 44,99 12 47,75 12 54,90 13 1,31 13 16,43	s. +1,324 1,016 1,720 0,995 2,230	-8 ,5488 ,5976 ,4837 ,6020 ,4006	+9,0319 9,0807 8,9666 9,0838 8,8799	+0,1219 0,0069 0,2355 9,9978 0,3483	+8,4565 ,5272 ,3460 ,5329 ,1419
771 772 773 774 775	Argus	7 9 7.8 7	3 4 3 3	13 34,47 13 56,56 14 9,54 14 11,41 14 36,85	2,087 0,852 1,517 1,801 1,760	-8,4259 ,6301 ,5255 ,4775 ,4870	+8,9030 9,1051 8,9997 8,9513 8,9583	+0,3195 9,9304 0,1810 0,2555 0,2455	+8,2128 ,5687 ,4145 ,3271 ,3435
776 777 778 779 780	Argus	7 8 7 7 7.8	24 3 3 3	14 46,61 14 52,89 15 4,77 15 5,93 16 2,12	2,272 1,713 1,577 0,964 1,435	8,4035 ,4964 ,5214 ,6197 ,5503	+8,8727 8,9661 8,9893 9,0881 9,0130	+0,3564 0,2338 0,1978 9,9841 0,1568	+8,1299 ,3602 ,4037 ,5527 ,4485
781 782 783 784 785	Argua	7 6.7 7	3   3	16 4,46 16 7,68 16 16 26,93	2,270 1,218 1,450 1,655 1,458	8,4106 ,5865 ,5494 ,5158 ,5488	+8,8724 9,0483 9,0103 8,9755 9,0090	+0,3560 0,0856 0,1614 0,2188 0,1638	+8,1382 ,6035 ,4461 ,3883 ,4447
786 787 788 789 790	Argus	7 7.8 7.8 8 6.7	2 3 10 3	16 27,05 16 27,40 16 30,28 16 46,91 16 57,31	1,065 2,057 1,451 2,063 1,656	8,6123 ,4473 ,5508 ,4461 ,5188	9,0724 8,9066 9,0102 8,9062 8,9753	+0,0273 ,3132 ,1617 ,3145 ,2191	+8,5997 ,2429 ,4475 ,2410 ,3915
791 792 793 794 795	Argus Cen. Mej,	7.8 6.7 7.8 7 6.7	3 3 4 3	16 57,87 17 12,15 17 24,41 17 26,90 17 39,60	1,655 1,199 0,808 2,336 2,343	8,5190 ,5959 ,6566 ,4084 ,4084	+8,9755 0,0512 9,1110 8,8616 8,8605	+0,2188 0,0788 9,9074 0,3685 0,3698	+8,3918 ,5145 ,5977 ,1093 ,1063
796 797 798 799 800	Argus	7 7 7 8 7	3 3 3	17 42,13 17 56,65 18 24,50 19 32,96 19 37,77	2,055 1,022 2,040 0,735 1,255	8,4550 ,6275 ,4617 ,6797 ,6007	+ 8,9066 9,0788 8,9088 9,1214 9,0416	+0,3128 0,0094 0,3096 9,8663 0,0086	+8,2520 ,5577 ,2629 ,6244 ,5156
801 802 803 804 804	Argua	7.8 7 7 9 7	3 4 4 3 3	19 45,13 19 40,91 20 2,45 20 8,60 21 13,59	0,740 1,390 1,380 1,010 0,715	8,6800 ,5831 ,5826 ,6420 ,6924	+9,1205 ,0192 ,0211 ,0802 ,1239	+9,8692 0,1430 0,1399 0,0043 9,8543	+8,6245 ,4870 ,4870 ,5733 ,6382
806 807 808 809 810	Argus	8 7 8 6.7 8.9	3 3 3 3 3	21 21,59 21 23,92 21 41,00 22 15,95 22 28,02	1,416 1,048 0,452 1,539 1,279	8,5839 ,6437 ,6753 ,5684 ,6129	+9,0146 9,0741 9,1037 8,9937 9,0371	+0,1511 0,0204 9,9304 0,1874 0,1068	+8,4852 ,5731 ,6152 ,4572 ,5265

No.	Declination.	Annual		Logar	ithms of		Diffe		the Brisbane Ascension	Catalogue.
110.	(South.) Jan. 1. 1840.	Precession	a'	<i>b'</i>	c'	d'	No.		om   T.	Declin.
766 767 768 769 770	63 56 32,03 58 15 32,08 46 43 3,88 58 31 14,88 33 26 6,60	- 6,260 6,260 6,276 6,276 6,276 6,310	+0,0099 0,0154 9,9948 0,0154 9,9469	+9,4023 ,4243 ,3580 ,4267 ,2394	-0,7965 ,7965 ,7977 ,7977 ,8000	9,9777 9777 ,0776 ,9776 ,9773	1549 1551 1550 1555 1554	- 2,56 - 1,71 - 1,71 - 3,37 - 2,51	5.	+ 9,61 - 3,12 +11,80 - 0,66 - 3,09
771 772 773 774 776	37 44 51,09 60 14 30,53 50 45 11,15 45 0 39,97 45 56 24,98	6,337 6,365 6,375 6,381 6,414	+9,9057 0,0162 0,0035 9,9899 9,9925	+9,2869 ,4405 ,3917 ,3626 ,3618	-0,8019 ,8038 ,8045 ,8049 ,8071	—9,9771 ,9769 ,9768 ,9768 ,9765	1556 1560 1559 1557 1562	- 2,09 + 3,10 - 2,79 - 1,81 - 1,57		$\begin{array}{c c} - & 0,15 \\ - & 6,32 \\ + & 1,19 \\ - & 1,93 \\ + & 2,83 \end{array}$
776 777 778 779 780	32 10 47,35 46 55 37,33 49 41 21,72 58 58 17,51 52 16 5,89	6,442 6,436 6,458 6,454 6,580	+9,9400 9,9948 0,0013 0,0149 0,0056	+9,2335 ,3705 ,3905 ,4408 ,4112	~0,8090 ,8086 ,8101 ,8098 ,8149	—9,9763 ,9764 ,9762 ,9762 ,9756	1563 1564 1565 1566 1571	+ 2,21 - 2,00 - 1,07 - 1,95		$\begin{array}{c c} + & 1,64 \\ - & 6,31 \\ - & 0,83 \\ + & 1,69 \\ + & 2,22 \end{array}$
781 782 783 784 785	32 17 8,92 55 40 33,55 52 1 48 12 48,85 51 53	6,542 6,542 6,553 6,569 6,563	+9,9405 0,0111 0,0052 9,9969 0,0052	+9,2414 ,4307 ,4112 ,3881 ,4111	-0,8157 ,8157 ,8164 ,8175 ,8171	-9,9755 ,9755 ,9754 ,9753	1570 1572 1574 1576 1577	-1,66 $-2,14$ $-3,35$		-63,12 -0,99 -2,28
786 787 788 789 790	57 45 23,90 38 38 6,27 52 1 7,64 38 34 15,15 48 13 31,14	6,563 6,574 6,574 6,563 6,613	+0,0128 9,9685 0,0052 9,9675 9,9969	+9,4428 ,3116 ,4127 ,3101 ,3911	-0,8171 ,8179 ,8178 ,8171 ,8204	9,9754 ,9753 ,9753 ,9754 ,9750	1579 1567 1578 1573 1583	- 2,97   -10,67   - 1,67   -28,10   - 0,96		+64,82 + 5,07 + 2,07 + 2,24 + 5,21
791 792 793 794 795	48 13 53,65 55 59 48,42 00 50 44,86 30 8 39,37 29 54 38,31	6,013 6,620 6,640 6,657 6,673	+9,9969 0,0103 0,0140 9,9289 9,9274	+9,3912 ,4381 ,4615 ,2223 ,2203	-0,8204 ,8215 ,8222 ,8233 ,8243	9,9750 ,9748 ,9747 ,9746 ,9745	1582 1588 1592 1584 1590	- 1,52 - 1,19 - 2,18 - 2,60 - 3,19	— <u>1,75</u>	+ 9,55 + 4,99 + 3,18 - 8,79 - 1,69
796 797 798 799 800	38 47 5,46 58 22 14,73 39 13 41,18 61 41 10,08 55 16 24,02	6,679 6,684 6,739 6,816 6,672	+9,9680 0,0133 9,9694 0,0145 0,0086	+9,3198 ,45 <b>3</b> 4 ,32 <b>79</b> ,4763 ,4470	0,8247 ,8251 ,8286 ,8335 ,8342	9,9744 ,9744 ,9739 ,9733 ,9732	1594 1595 1597 1603 1602	-+ 1,04 3,66 3,29 2,40		+ 1,98 - 0,11 - 4,04 + 10,69 - 2,14
801 802 803 804 805	61 38 39,97 53 11 51,70 53 21 30,45 58 36 13,12 61 57 36,16	6,832 6,898 6,868 6,865 6,958	+0,0141 ,0052 ,0056 ,0120 ,0137	+9,4772 ,4403 ,4388 ,4660 ,4804	-0,8340 ,8387 ,8362 ,8367 ,8425	,9726 ,9729 ,9729	1605	- 3,16 +46,84 - 2,89 2,83 1,48		+ 5,33 + 3,74 + 10,37 - 1,57 + 2,30
80.6 80.7 80.8 80.9 81.0	52 47 55,63 58 10 56,95 60 31 27,15 50 41 64,50 55 2 36,82	6,969 6,975 7,002 7,046 7,062	+0,0038 ,0111 ,0124 ,0000 ,0069	4-9,4426 ,4710 ,4831 ,4348 ,4606	-0,8432 ,8435 ,8452 ,8479 ,8489	9,9720 ,9720 ,9717 ,9713 ,9712	1613 1610 1617 1619 1623	- 1,87 - 2,32 + 2,84 - 2,25 - 1,81	- 2,28 	+ 4,76 + 4,83 - 3,76 + 3,43 - 5,43

			No.	Right Ascen.	Annual		Logarith	hms of	
No.	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesn,	a	ь	С	d
811 812 813 814 815	Argus	7.8 7 8 8	3 4 4 3	H. M. S. 7 23 17,90 23 27,54 24 11,36 24 25,74 25 8,87	8. + 1,289 1,522 1,281 0,971 2,207	-8,6156 ,5778 ,6220 ,6717 ,4693	+9,0362 8,9963 9,0364 9,0853 8,8780	+0,1102 0,1824 0,1075 9,9872 0,3438	-1-8,5286 ,4688 ,5359 ,6060 ,2243
816 817 818 819 820	Argus	7 8 7.8 6.7 6.7	\$ 4 3 3 3	25 17,42 25 51,33 26 4,22 26 7,24 26 17,65	1,095 1,589 1,294 1,468 1,572	—8,6675 ,5877 ,6299 ,6029 ,5844	+9,0658 8,9927 9,0337 9,0063 8,9868	+0,0394 ,1874 ,1119 ,1638 ,1964	+8,5848 ,4775 ,5431 ,5014 ,4704
821 822 823 824 825	Argus	$\frac{6}{7}$ $\frac{6}{6.7}$	3 3 5 3	26 28,46 26 44,00 26 26 54,71 27 42,93	2,505 1,544 1,597 1,355 0,839	-8,4314 ,5914 ,5822 ,6244 ,7092	+8,8327 8,9916 8,9824 9,0235 9,1046	+0,3988 0,1866 0,2033 0,1319 0,9227	4-8,0472 ,4800 ,4654 ,5528 ,6507
826 827 828 829 830	Argus	6.7 7 6.7 7	3 3 3 3 3	28 5,51 28 27,94 28 42,51 29 0,89 29 8,90	1,924 1,116 1,923 1,414 1,966	-8,5325 ,6708 ,5356 ,6255 ,5304	4-8,9250 9,0619 8,9248 9,0129 8,9171	+0,2842 ,0477 ,2840 ,1504 ,2936	+ 8,3648 ,6974 ,3676 ,5291 ,3635
831 832 833 834 836	Argus	6.7 8 7 7 (7)	3 3 4 3	29 14,63 29 29,79 29 48,76 29 50,76 30 30,19	1,582 1,315 2,177 1,878 2,464	-8,5979 ,0442 ,4976 ,5491 ,4579	+8,9824 9,0295 8,8807 8,9323 8,8371	+0,1992 ,1189 ,3859 ,2767 ,3916	+8,4837 ,6567 ,2050 ,3905 ,1069
836 837 838 839 840	Argus Q	7 7 7 5.6	3 4 4 3 3 3	30 45,40 31 17,25 31 41,33 31 42,52 31 43,59	1,027 1,853 1,853 1,482 1,677	—8,6069 ,5607 ,5628 ,6264 ,5936	+9,0754 8,9360 8,0360 9,0007 8,9668	+0,0116 ,2679 ,2679 ,1708 ,1708 ,2245	+8,6293 ,4073 ,4096 ,5241 ,4681
841 842 843 844 845	Argus.	8 7.8 6.7 6.7	3 3	\$1 58,93 32 7,88 32 15,56 32 29,25 32 37,80	1,851 2,183 1,680 1,410 1,277	8,5642 ,5077 ,5959 ,6437 ,6662	+8,9360 8,8785 8,9663 9,0127 9,0348	+0,2674 ,3390 ,9253 ,1492 ,1062	+8,4113 ,2745 ,4702 ,5487 ,5824
846 847 848 849 850		6.7 7 7 7		32 53,89 32 54,82 32 55,61	2,457 2,587 1,181 2,051 2,094	-8,4687 ,4791 ,6832 ,5340 ,5266	+8,8352 8,8453 9,0505 8,9006 8,8931	+0,8904 ,3778 ,0722 ,8120 ,3210	+8,1179 ,1049 ,6066 ,3389 ,3201
851 852 853 854 855	Y <sup>2</sup>	8 8 6 6 8.9		33 47,04 33 47,30 34 5,01	2,116	8,4693 ,5707 ,6006 ,5281 ,6893	+8,8855 8,9330 8,9630 8,8887 9,0482	+0,3890 ,2704 ,2292 ,3255 ,0766	4-8,1198 ,4162 ,4734 ,3159 ,6122

No.	Declination (South.)	Annual		Logari	thms of		Diffe		he Brisbane scension	Catalogue.
110.	Jan. 1. 1840.	Precession	a'	b'	c'	d'	No.	l fr	om L_T.	Declin.
811 812 813 814 815	54 55 21,18 51 4 39,82 55 5 0,70 59 15 12,80 34 39 3,93	7,127 7,144 7,205 7,215 7,285	+0,0060 0,0000 0,0066 0,0103 9,9479	+9,4640 ,4430 ,4695 ,4900 ,3155	,8529 ,8539 ,8576 ,8582 ,8624	—9,9706 ,9705 ,9700 ,9699 ,9692	1627 1629 1633 1635 1637	$\begin{array}{r} \text{s.} \\ -2,04 \\ -1,55 \\ +0,89 \\ -4,81 \\ -2,61 \end{array}$	5.	- 3,67 + 1,24 +28,35 + 4,47 + 0,48
816 817 818 819 820	57 44 35,83 50 52 20,09 54 58 23,71 52 19 9,82 50 16 31,32	7,292 7,340 7,356 7,362 7,378	+0,0082 9,9983 0,0047 0,0004 9,9965	+9,4881 ,4635 ,4780 ,4635 ,4520	-0,8628 ,8667 ,8666 ,8670 ,8679	9,9692 ,9687 ,9686 ,9686 ,9684	1638 1639 1641 1640 1643			- 0,76 - 1,69 - 5,70 - 3,58 - 0,71
821 822 823 824 825	24 22 14,65 50 49 16,41 49 49 54 3 49,42 60 54 37,26	7,395 7,410 7,410 7,427 7,480	+9,8915 9,9974 9,9956 0,0026 0,0094	+9,1827 ,4574 ,4511 ,4773 ,5135	-0,8689 ,8698 ,8698 ,8708 ,8739	—9,9682 ,9681 ,9681 ,9679 ,9674	1642 1644 1645 1647 1652	$ \begin{array}{r} -4,57 \\ -3,05 \\ -2,88 \\ -4,20 \end{array} $		+ 1,05 + 0,43 + 3,97 - 4,22
826 827 828 829 830	42 44 27,79 57 35 59,03 42 46 3,64 53 12 88,12 41 43 31,96	7,524 7,546 7,672 7,600 7,611	+9,9768 0,0060 9,9768 0,0004 9,9727	+9,4062 ,5023 ,4093 ,4824 ,4026	0,8764 ,8777 ,8792 ,8809 ,8814	—9,9670 ,9663 ,9665 ,9663 ,9662	1654 1655 1656 1659 1668	- 1,89 - 3,03 - 1,38 - 2,06 - 2,23		+ 1,28 + 2,09 + 2,48 + 1,55 + 6,67
831 832 833 834 835	50 14 21,04 54 49 13,32 35 48 45,51 48 56 46,57 26 27 31,67	7,616 7,632 7,663 7,663 7,723	+9,9952 0,0026 9,9508 9,9791 9,9031	+9,4656 ,4932 ,3500 ,4239 ,2349	-0,8817 ,8826 ,8844 ,8844 ,8878	—9,9661 ,9660 ,9657 ,9657 ,9651	1660 1661 1662 1663 1664	- 3,25 - 2,61 - 1,35 - 3,22 - 1,09		+ 2,07 - 0,60 + 62,01 + 4,70 - 4,58
836 837 838 839 840	58 50 54,53 44 36 11,96 44 37 58,89 52 10 43,30 48 29 27,16	7,734 7,783 7,815 7,799 7,815	+0,0060 9,9805 9,9805 9,9974 9,9899	-+9,5189 ,4357 ,4378 ,4877 ,4654	-0,8884 ,8911 ,8929 ,8920 ,8929	9,0650 ,9645 ,9612 ,9643 ,9642	1667 1668 1672 1674 1673	- 0,59 - 2,71 2,53 - 2,72 - 2,28		+ 5,45 + 1,29 + 4,04 + 4,32 + 6,52
841 842 843 844 845	44 40 21,61 35 45 11,38 48 28 19,86 53 27 49,06 55 31 56,49	7,837 7,853 7,858 7,880 7,880	+9,9800 9,9489 9,9899 9,9987 0,0013	+9,4392 ,3598 ,4677 ,4995 ,5111	-0,8941 ,8950 ,8953 ,8965 ,8968	—9,9640 ,9638 ,9638 ,9635	1676 1678 1681 1682 1684	- 3,43 - 1,42 - 1,67 - 1,01 - 2,31		- 2,55 + 2,25 + 6,51 - 3,26 - 4,44
846 847 848 849 850	26 29 58,47 26 25 56 56 30,18 39 37 52,35 38 25 2,84	7,916 7,922 7,905 7,916 7,916	+9,9020 9,9164 0,0030 9,9638 9,9595	+9,2469 ,2827 ,5194 ,4015 ,3901	-0,8985 ,8988 ,8979 ,8985	-9,9632 ,9631 ,9635 ,9032 ,0632	1683 1685 1690 1689 1688	- 0,64 + 0,83 - 2,82 - 2,54 - 3,98		+ 1,37 - 0,19 - 0,26 - 8,26;
851 852 853 854 856	26 83 26,23 44 27 59,61 48 14 17,29 87 46 26,57 56 51 15,47	7,922 7,980 7,980 8,008 8,034	+9,9025 9,9791 9,9981 9,9566 0,0017	+9,2474 ,4456 ,4729 ,3894 ,5259	-0,8988 ,9020 ,9020 ,9035 ,9049	-9,9631 ,9625 ,9625 ,9622 ,9620	1686 8081 1694 1696 1701	+ 0,03 2,37 2,58 0,70 + 1,76	—4,09 ————————————————————————————————————	- 2,41 + 2,86 + 4,48 + 5,84

No	27	1	No.	Right Ascen.	Annual	<u> </u>	Logar	ithms of	<del></del>
1,40	Names.	Mag.	Obs.		Precesn.	a	b	c	d
85 85 85 85 86	3	9 7 6 7.8	3 3 3 3	11. M. s. 7 34 30,17 34 48,44 35 9,86 35 16,28 36	.s + 1,265 1,676 1,451 1,264 2,500	-8,6775 ,6091 ,6504 ,6815 ,4773	+9,0364 8,9660 9,0048 9,0363 8,8270	+0,1021 ,2243 ,1617 ,1017 ,3979	+8,5952 ,4849 ,5522 ,5995 ,1030
86 86 86 86 86	3	7.8 6.7 9 7 8	3 3 3	36 10,65 36 21,04 36 27,48 37 13,30 37 35,40	0,930 1,879 1,869 1,371 1,463	-8,7388 ,5802 ,5821 ,6730 ,6591	+9,0892 8,9293 8,9311 9,0180 9,0921	+9,9685 0,2739 0,2716 0,1370 0,1652	+8,6776 ,4241 ,4279 ,5829 ,5605
86 86 86 86		7.8 7.8 7 6.7 7.8	4 4 4 3	38 25,80 38 37,20 38 39,31 38 52,91 38 59,70	1,271 1,346 0,996 2,135 1,284	—8,6954 ,6838 ,7406 ,5467 ,6960	+9,0344 9,0218 9,0786 8,8830 9,0320	+ 0,1041 0,1290 9,9983 0,3294 0,1086	+8,6138 ,6962 ,6766 ,3318 ,6135
87: 87: 87: 87:		6.7 8 7 7 6	3 4 3 3 3	39 14,10 39 16,62 39 25,01 39 25,02 39 37,28	1,107 1,340 2,137 1,105 2,253	-8,7259 ,6880 ,5483 ,7273 ,5299	+9,0609 9,0226 8,8823 9,0613 8,8625	+0,0441 ,1271 ,3298 ,0484 ,3528	+ 8,6566 ,6011 ,3329 ,6672 ,2767
876 877 878 879 880		7 6 6 6.7 7.8	3 3 3 3 3	39 41,79 39 52,51 39 54,33 39 55,64 39 59,64	1,491 1,140 1,786 1,620 1,620	8,6640 ,7243 ,6131 ,6430 ,6430	+ 8,9966 9,0553 8,9444 8,9740 8,9740	+0,1735 ,0569 ,2519 ,2095 ,2095	+8,5633 ,6521 ,4746 ,5279 ,5279
881 882 883 884 886		7 7 7 7 7.8	3 2 3 3 4	40 24,54 40 28,74 40 50,90 40 52,51 40 55,86	1,879 2,138 2,144 1,885 1,4 <b>8</b> 9	8,5988 ,5531 ,5536 ,5998 ,6706	+8,9275 ,8815 ,8803 ,9262 ,9966	+0,2739 ,3300 ,3312 ,2753 ,1729	+8,4444 ,3381 ,3370 ,4446 ,6705
886 887 888 889 890		6.7 8 7.8 7 7.8	3 4 5 3 3	41 2,89 41 18,64 41 22,65 41 44,90 41 45,31	2,066 1,255 1,870 2,015 2,015	8,5682 ,7117 ,6049 ,5806 ,5803	+ 8,8939 9,0361 8,9287 8,9025 8,9025	+0,3151 ,0986 ,2718 ,3043 ,3043	+8,3734 ,6320 ,4527 ,3983 ,3983
891 892 893 894 895		7 7 6.7 7	3 3 3 4	41 57,95 42 5,31 42 14,15 42 18,75 42 40,28	1,570 1,742 1,257 2,518 2,048	8,6603 ,6309 ,7156 ,5008 ,5785	+8,9821 8,9515 9,0355 8,8201 8,8961	+0,1959 ,2410 ,0993 ,4011 ,3113	+8,5518 ,5002 ,6360 ,1191 ,3890
896 897 898 899 906	Q	7.8 7.8 7 5 6.7	3 3 3 3	42 47,94 42 50,35 43 27,79 43 34,37 43 46,11	1,794 1,791 1,476 1,793 2,049	8,6248 ,6252 ,6840 ,6281 ,5833	+8,9418 ,9422 ,9980 ,9415 ,8954	+0,2538 ,2531 ,1691 ,2536 ,3115	+8,4863 ,4871 ,5860 ,4900 ,3942

	Declination.	Anogal	<del></del> 	Logarit	lims of		Diffe	rence from the Right A	ho Brisbane scension	Catalogue.
No.	(South.) Jan. 1. 1840.	Procession	a'	<i>b'</i>	c'	d'	No.	M,C,		Declin.
856 857 858 859 860	55 49 0,09 48 41 3,48 52 54 24,43 55 51 52,07 24 58	8,034 8,067 8,104 8,099 8,177	+0,0009 9,9886 9,9961 0,0000 9,8910	+9,5207 ,4805 ,5083 ,5244 ,2364	-0,9049 ,9067 ,9087 ,9084 ,9126	-9,9620 ,9616 ,9612 ,9613 ,9604	1700 1702 1705 1706 1710	s. - 3,25 - 1,67 + 4,30 - 2,72	2,91	+ 3,31 + 7,43 + 4,48 - 2,44
861 862 863 864 865	60 15 51,33 44 15 33,84 44 30 35,87 54 20 5,10 52 49 9,47	8,168 8,189 8,190 8,253 8,286	+0,0035 9,9768 9,9768 9,9969 9,9943	+9,5489 ,4551 ,4571 ,5246 ,5177	0,0121 ,9132 ,9132 ,9166 ,9183	—9,9606 ,9603 ,9603 ,9596 ,9593	1713 1711 1712 1719 1720	6,77 1,90		$\begin{array}{r} + \ 0,15 \\ + \ 5,90 \\ + \ 1,23 \\ - \ 0,12 \\ + \ 6,75 \end{array}$
866 867 868 869 870	55 56 20,36 54 48 5,88 59 37 34,42 37 33 30,78 55 46 2,22	8,348 8,364 8,364 8,391 8,395	+9,9983 9,9969 0,0013 9,9533 9,9974	+9,5380 ,5329 ,5564 ,4070 ,5396	0,9216 ,9224 ,9224 ,9238 ,9240	9,9586 ,9584 ,9584 ,9582 ,9581	1794 1725 1727 1726 1728	- 2,06 - 3,13 - 1,85 - 2,31 - 2,39		- 8,40 + 2,25 - 7,38 + 6,25 + 1,36
871 872 873 874 875	58 15 3,90 54 55 54,26 37 30 12,75 58 17 22,21 33 51 41,88	8,412 8,417 8,427 8,427 8,448	+0,0000 9,9965 9,9523 0,0000 9,9375	+9,5526 ,5363 ,4084 ,5537 ,3717	-0,9249 ,9251 ,9257 ,9257 ,9268	9,9579 ,9579 ,9577 ,9577 ,9575	1732 1733 1730 1737 1736	- 0,86 - 2,59 - 2,77	- 2,83 	+ 1,71 + 3,71 - 4,61 - 0,64
876 877 878 879 880	52 27 24,32 57 50 57,61 46 37 25,98 50 4 47,38 50 5 24,06	8,448 8,475 8,470 8,491 8,470	4-9,9925 1999, 9089, 1889,	+9,5241 ,5540 ,4876 ,5111 ,5111	-0,9268 ,9281 ,9279 ,9281 ,9281	9,9575 ,9572 ,9573 ,9572 ,9572	1738 1742 1739 1740 1741	$ \begin{array}{r} -2,74 \\ -1,42 \\ -1,55 \\ -2,04 \end{array} $		$\begin{array}{c} +13,99 \\ +5,21 \\ +1,71 \\ +3,20 \\ +10,98 \end{array}$
881 882 883 884 885	44 29 45,26 37 32 44,67 37 22 53,26 44 22 16,05 52 34 7,67	8,507 8,517 8,544 8,549 8,554	+9,9752 ,9623 ,9513 ,9745 ,9921	+9,4738 ,4133 ,4132 ,4747 ,5302	0,9800 ,9303 ,9316 ,9319 ,9322	—9,9568 ,9567 ,9564 ,9564 ,9563	1743 1744 1745 1748 1749	- 2,70 - 2,89 - 2,98 - 2,57 + <b>0</b> ,11		- 1,25 + 0,46 - 5,19 + 0,81 + 7,35
886 887 888 .889 .890	39 40 13,40 56 19 17,65 44 46 41 6 43,38 41 7 31,99	8,559 8,580 8,691 8,623 8,617	+9,9595 ,9969 ,9750 ,9643 ,9643	+9,4357 ,5519 ,4800 ,4614 ,4514	—0,9324 ,9335 ,9340 ,9354 ,9354	— 9,9563 ,9560 ,9559 ,9556 ,9556	1748 1752 1751 1753 1754	- 3,18 - 2,22 + 1,53 - 1,41 - 0,83		- 4,89 - 0,62 0,20 + 6,90
891 892 893 894 895	51 9 38,37 47 43 12,00 56 19 56,70 24 30 59,12 40 15 22,94	8,622 8,641 8,654 8,665 8,691	+9,9890 ,9818 ,9961 ,8859 ,9605	+9,5252 ,5040 ,5556 ,2641 ,4476	-0,9356 ,9367 ,9372 ,9377 ,9391	9,9555 ,9533 ,9552 ,9551 ,9548	1756 1759 1762 1760 1764	+ 0.11 $- 1.35$ $- 1.27$		+ 2,60 + 3,64 + 1,47 + 2,28 - 5,90
896 897 898 899 900	46 37 3,79 46 40 33,71 52 56 10,77 46 40 34,95 40 18 9,90	8,701 8,701 8,749 8,759 8,750	+9,9791 ,9791 ,9908 ,9786 ,9600	+9,4992 ,4995 ,5421 ,5024 ,4525	-0,9396 ,9396 ,9419 ,9425 ,9435	9,9546 ,9546 ,9541 ,9540 ,9537	1766 1767 1771 1772 1773	-2,41 $-1,07$	-3,10	+ 5,15 + 4,46 + 6,54 + 3,37 - 0,15

37	31	n/I	No.	Right Ascen.	Annual		Logari	thms of	
No.	Names.	Mag.	Obs.		Precesn.	a	6	C	d
901 902 903 904 905	P Argus	5.6 6 7 7	3 2 - 9 3	H. M. S. 7 44 21,70 44 23,40 44 44 56,02 45 38,03	*1,826 1,806 1,288 1,285 1,905	8,6244 ,6293 ,7214 ,7227 ,6168	+8,9355 8,9389 9, <b>0</b> 297 9,0301 8,9204	+0,2615 ,2567 ,1099 ,1089 ,2799	4-8,4812 ,4898 ,6401 ,6417 ,4600
906 907 908 909 910	Argus	7 7.8 7 8 8	3 3 4 5	45 41,09 45 44,52 45 56,52 45 48,36 45 58,90	1,358 1,406 1,399 1,390 1,381	8,7140 ,7061 ,7073 ,7091 ,7125	+9,0175 9,0093 9,0105 9,0120 9,0144	+0,1329 ,1480 ,1468 ,1430 ,1402	4-8,6275 ,6164 ,6173 ,6199 ,6234
911 912 913 914 915	Argus	7.8 6.7 6.7 6.7 7.8	3 3 3	46 1,66 46 2,85 46 26,81, 46 33,97 48 1,87	1,809 1,637 1,796 1,008 2,643	-8,6360 ,6669 ,6402 ,7759 ,5203	8,9376 8,9686 8,9399 9,0747 8,8122	+0,2574 ,2140 ,2548 ,0086 ,4068	4-8,4964 ,5519 ,5030 ,7130 ,1265
916 917 918 919 920	Argus	7.8 8 6.7 6 7	3 3 3 3	48 7,08 48 13,17 48 27,10 48 33,06 48 34,62	1,068 1,360 1,644 1,690 2,350	8,7730 ,7266 ,6761 ,6684 ,6510	+9,0649 9,0182 8,9664 8,9581 8,8407	-j-0,0286 ,1303 ,2159 ,2270 ,3711	于8,7072 ,64.16 ,5612 ,5476 ,2645
921 922 923 924 925	R Argus	5.6 6.7 7.8 9	3 3 4 3 3	48 36,10 48 40,41 49 22,02 49 29,06 49 36,88	1,762 1,433 1,077 1,086 1,925	-8,6656 ,7143 ,7768 ,7760 ,6300	+8,7451 9,0037 0,0631 0,0617 8,9148		-(-8,5247 ,6221 ,7108 ,7095 ,471-
926 927 928 929 930	Argus	7 7 7 8 8.9	3 3 3 3	50 0,60 50 25,93 50 35,48 51 11,91 51 16,79	2,387 1,650 1,803 1,528 1,428	8,6508 ,6835 ,6557 ,7084 ,7264	-J-8,8337 8,9646 8,9867 8,9861 9,0037	+ 0,3778 ,2175 ,2560 ,1841 ,1547	+8,2482 ,5687 ,5191 ,6079 ,6356
931 932 933 934 935	Argus X	8 7 8 7 4.5	3 3 3 4 4	51 20,98 51 59,97 52 23,58 52 24,42 52 42,60	1,806 1,802 1,449 1,720 1,530	-8,6588 ,6633 ,7274 ,6788 ,7146	+8,9359 8,9361 8,9996 8,9510 8,9862	-J-0,2567 ,2557 ,1611 ,2365 ,1847	-1-8,5292 ,5278 ,6351 ,5565 ,6144
936 937 938 939 940	Argus	6 7.8 5.6 7	- 3 4 3	52 53 35,97 53 36,27 53 39,02 54 10,76	2,417 1,023 1,325 1,724 1,829	-8,5596 ,8040 ,7540 ,6832 ,6674	+8,8263 9,0707 9,0208 8,9497 8,9314	+0,3318 ,0009 ,1222 ,2365	+8,2452 ,7420 ,6727 ,5599 ,5295
942 943 944 946	Can. Maj. Argus	7 7 7 7.8	3 - 1 4	54 21,73 54 30,79 54 54 37,18 54 39,86	1,257 2,622 1,444 1,748 1,446	-8,7689 ,4476 ,7361 ,6226 ,7376	+9,0320 8,8098 8,9998 8,9449 8,9994	+0,0993 ,4017 ,1596 ,2426 ,1602	+8,6928 ,1732 ,6449 ,6563 ,6462

λτ	Declination	Annual		Logari	thins of		Diffe	Right A	he Brisbane scension	Catalogue.
No.	(South.) Jan. 1. 1840.	Precession	a'	b'	¢′	d'	No.	M. C.	om   T.	Declin.
901 902 903 904 905	45 58 22,42 46 27 26,75 56 0 50 4 17,74 44 10 35,37	8,796 8,822 8,843 8,859 8,921	+9,9763 ,9773 ,9939 ,9939 ,9708	+9,4992 ,5038 ,5634 ,5644 ,4917	0,9443 ,9456 ,9466 ,9474 ,9504	9,9535 ,95 <b>32</b> ,9530 ,9528 ,9520	1778 1780 1782 1784 1787	$ \begin{array}{c c} s. \\ - 1.44 \\ - 4.02 \\ - 3.89 \end{array} $	$-\frac{2,46}{-2,94}$	+ 5,26 + 4,58 + 1,77 + 1,39
906 907 908 909 910	56 0 29,59 54 24 21,05 54 21 54 30 4,51 54 40 35,77	8,921 8,927 8,927 8,932 8,947	+9,9921 ,9912 ,9917 ,9917 ,9917	+9,5620 ,5581 ,5587 ,5698 ,5614	0,9504 ,9507 ,9507 ,9509 ,9517	-9,9520 ,9520 ,9520 ,9519 ,9517	1791	- 2,93 -14,02 - 0,99		+ 1,82 + 1,80 
911 912 913 914 915	46 27 50,72 50 6 11,80 46 48 31,19 59 53 11,87 23 48	8,953 8,953 8,984 9,000 9,114	+9,9768 ,9841 ,9773 ,9961 ,8791	-1-9,5105 ,5350 ,5144 ,5894 ,2640	0,9519 ,9519 ,9535 ,9542 ,9597		1794 1796 1798 1800 1804	$ \begin{array}{r} -0,34 \\ -1,33 \\ -1,38 \\ +1,05 \end{array} $		+ 6,36 - 4,98 + 6,05 + 4,33
916 917 918 919 920	50 14 10,86 55 17 32,78 50 6 33,18 49 11 55,09 31 7 2,33	9,114 9,119 9,140 9,150 9,150	+9,9943 ,9908 ,9827 ,9809 ,9156	+9,5920 ,5730 ,5441 ,5387 ,3730	-0,9597 ,9600 ,9609 ,9614 ,9614	9,9497 ,9496 ,9494 ,9492 ,9492	1806 1807 1809 1813 1808			+ 5,06 - 1,59 +69,65 + 3,78 - 2,43
921 922 923 924 925	47 41 15,03 63 57 11,70 69 11 56,83 69 4 43,25 43 56 10,97	9,155 9,155 9,207 9,217 9,233	-1-9,9777 ,9886 ,9934 ,9934 ,9675	4-9,5288 ,5676 ,5962 ,5962 ,5048	0,9617 ,9617 ,9641 ,9646 ,9653	-9,9492 ,9492 ,9485 ,9484 ,94 <b>8</b> 2	1812 1814 1816 1818 1817	- 2,96 - 1,72 - 1,99	- 3,54 - 2,64 	+ 5,92 +13,11 -19,06 + 6,65 + 7,86
926 927 928 929 930	29 51 44,49 50 8 45,08 46 53 26,60 52 28 53,91 54 13 9,42	9,264 9,295 9,295 9,352 9,357	+9,9127 ,9814 ,9750 ,9850 ,9872	+9,3623 ,6515 ,6298 ,5685 ,5785	-0,9668 ,9683 ,9683 ,9709	9,9478 ,9474 ,9474 ,9467 ,9466	1819 1822 1821 1826 1828	- 1,29 12,63		- 3,18 - 4,93 + 2,84 - 3,59 - 0,79
931 932 933 934 935	46 53 28,70 47 2 31,28 53 56 14,82 48 50 11,05 52 33 17,05	9,362 9,434 9,445 9,445 9,470	+9,9741 ,9736 ,9859 ,9777 ,9841	+9,5329 ,5373 ,5809 ,5499 ,5743	0,9714 ,9747 ,9752 ,9752 ,9764	,9456	1827 1832 1834 1833 1835	- 4,08 +10,88 - 3,70 - 2,41 - 2,02		- 0,17 + 7,30 + 3,39 + 5,46 + 6,26
936 937 938 939 940	28 55 60 5 56,47 57 0 4,70 48 48 43,02 46 42 23,09	9,537 9,537 9,537 9,542 9,583	+9,9058 ,9908 ,9872 ,9768 ,9717	+9,3631 ,6155 ,5962 ,5544 ,5417	-0,9794 ,9794 ,9794 ,9796 ,9815	9,9442 ,9442 ,9442 ,9412 ,9436	1837 1842 1840 1839 1843	-3.26 $-2.70$		- 0,94 1,56 + 6,41 + 2,64
941 942 943 944 944	57 2 49,76 24 58 35,45 54 7 48 19 33,19 54 7 58,20	9,599 9,614 9,588 9,614 9,619	+9,9881 ,8825 ,9850 ,9750 ,9846	+9,6042 ,3067 ,5886 ,5546 ,5900	-0,9822 ,9829 ,9817 ,9829 ,9831	-9,9434 ,9432 ,9435 ,9432 ,9431	1846 1844 1845 1847 1849	-3,34 $-4,15$		$\begin{array}{c c} - & 2,92 \\ - & 1,82 \end{array}$ $- & 0,44$

No.	Names.	Mag.	No.	Right Ascen.	Annual		Logar	ithms of	<del></del>
			Obs.	Jan. 1, 1840.	Precesn.	а	6	C	d
946 947 948 949 950	Argus	6.7 8 7.8 6 6.7	4 4 2 3 3	n. m. s. 7 54 41,41 54 42,62 54 47,61 54 49,03 54 45,40	s. + 1,693 1,693 1,749 1,048 1,818	-8,6932 ,6932 ,6835 ,8053 ,6715	+8,9549 8,9549 8,9446 9,0663 8,9320	+0,2287 ,2287 ,2428 ,0204 ,2596	+8,5746 ,5746 ,5572 ,7423 ,5348
951 952 953 954 955	Argus	7.8 8 7.8	383	55 12,38 55 13,61 55 26,58 55	1,564 1,449 1,746 1,451 1,011	-8,7190 ,7391 ,6862 ,7396 ,8149	+8,9782 ,9987 ,9449 ,9983 9,0727	+0,1942 ,1611 ,2420 ,1617 ,0047	+8,6162 ,6478 ,5606 ,6482 ,7542
956 957 958 949 960	Argus	7 7 8 6.7 7.8	3 1 2 3	55 36,22 55 46,82 56 10,47 55 49,22 56 14,03	1,743 2,192 1,012 1,749 2,200	-8,6876 ,6060 ,8165 ,6876 ,6061	+8,9454 8,8626 9,0718 8,9441 8,8609	+0,2413 ,3408 ,0052 ,2428 ,3424	-+8,5625 ,3840 ,7557 ,6617 ,3817
961 962 963 964 965	Argus	7 7 6,7 6 6,7	3 3 3 3	56 37,90 56 45,36 56 50,28 56 53,09 66 53,68	1,935 1,718 1,066 1,034 1,480	-8,6565 ,6971 ,8106 ,8157 ,7409	- -8,9092 8,9495 9,0630 9,0680 8,9924	+0,2867 ,2350 ,0278 ,0145 ,1703	+ 8,4996 ,5761 ,7472 ,7539 ,6473
966 967 968 969 970	Argus	10 6.7 6.7 6 8	2 3 4 4	56 63,05 57 14,93 57 17,67 57 30,05 57 31,80	1,042 2,060 1,934 1,461 1,461	-8,8148 ,6355 ,6590 ,7466 ,7466	+9,0669 8,8858 8,9090 8,9957 8,9957	+0,0179 ,3139 ,2865 ,1646 ,1646	+8,7527 ,4514 ,5026 ,6550 ,6553
971 972 973 974 976	Argus	6.7 7 7 6.7	-6 3 3 3	58 58 7,75 58 8,23 58 9,13 58 53,44	1,406 1,455 1,706 2,002 1,730	8,7574 ,7506 ,7047 ,6494 ,7032	+9,0049 8,9965 8,9509 8,8959 8,9462	+0,1480 ,1629 ,2520 ,3015 ,2380	+8,6722 ,6598 ,6859 ,4792 ,5814
976 977 978 979 980	Argus	6.7 6.7 6.7 6.7	3 3	58 53,38 58 59 54,68 8 0 13,56 0 19,06	2,311 2,309 1,312 1,683 1,475	8,5969 ,5988 ,5991 ,7173 ,7653	+8,8396 ,8394 ,8388 ,9544 ,9921	+0,3638 ,3634 ,3640 ,2261 ,1688	+8,3348 ,3374 ,3367 ,6025
981 982 983 984 985	Argus	7.8 6.7 6	3 6 4 3	0 24,63 0 0 32,96 0 39,10 0 54,71	1,849 1,445 1,446 1,769 1,554	-8,6871 ,7616 ,7619 ,7029 ,7424	-+8,9233 ,9973 ,9972 ,9382 ,9775	+0,2669 ,1599 ,1602 ,2477 ,1917	+8,5479 ,6727 ,6728 ,5764 ,6538
986 987 988 989 989	Argua	7.8 6 7.8 7 6.7	5 3 3 3	1 0,72 1 32,84 1 57,08 2 40,63 2 58,81	1,448 1,923 2,269 1,623 1,767	-8,7632 ,6774 ,6150 ,7376 ,7121	+8,9968 ,9087 ,8445 ,9643 ,9873	+0,1608 ,2840 ,3558 ,2103 ,2472	+8,6741 ,5255 ,3710 ,6311 ,5380

NT.	Declination.	Annual		Logar	ithms of		Diffe		he Brisbane scension	Catalogue.
No.	(South.) Jan. 1. 1840.	Precession	a'	b'	c'	d'	No.		om   T.	Declin.
946 947 948 949 950	49 32 30,54 . 49 32 18,46 48 30 55,89 59 52 33,57 46 52 0,82	9,624 9,624 9,634 9,634 9,634	+9,9778 ,9773 ,9750 ,9899 ,9713	+9,5628 ,5628 ,5566 ,6189 ,5157	0,9834 ,9834 ,9838 ,9838 ,9843	-9,9431 ,9431 ,9429 ,9429 ,9428	1848 1848 1850 1852 1851		-1,77 -4,41	- 2,27 - 5,98 + 4,09
951 952 953 954 965	52 6 26,89 54 6 39,06 48 28 0,03 54 6 60 22	9,665 9,660 9,675 9,675 9,691	+9,9803 ,9841 ,9760 ,9836 ,9886	+9,6805 ,5917 ,5581 ,5923 ,6238	-0,9852 ,9850 ,9857 ,9857 ,9864	9,9425 ,9426 ,9424 ,9424 ,9422	1853 1854 1856 1857 1862	0,58 2,97 3,62 		- 5,50 + 4,13 + 9,65
956 957 958 959 960	48 32 37,95 36 50 33,00 60 23 19,32 48 25 55,32 36 36 27,49	9,691 9,711 9,731 9,711 9,742	+9,9745 ,9400 ,9886 ,9745 ,9390	+9,5593 ,4633 ,6255 ,5595 ,4623	—0,9863 ,9873 ,9882 ,9873 ,9886	9,9422 ,9419 ,9416 ,9419 ,9415	1858 1859 1863 1860 1861	- 2,47 - 2,25 - 2,79 - 3,95 - 2,32	-2,37 -2,37	+10,06 $-2,56$ $-2,78$ $+6,40$ $+5,77$
961 962 963 964 965	44 9 22,78 49 10 40,99 1 59 46 6,99 60 8 55,90 53 42 31,49	9,777 9,782 9,782 9,782 9,798	+9,9633 ,9750 ,9477 ,9841 ,9843	+9,5314 ,5675 ,6251 ,6268 ,5956	-0,9902 ,9904 ,9904 ,9904 ,9911	-9,9410 ,9409 ,9409 ,9409 ,9407	1865 1867 1868 1869 1870	+ 2,15 - 1,36 - 3,06 - 3,40 + 3,99		+ 7,36 + 1,37 + 1,59 + 0,42 + 5,64
966 967 968 969 970	60 4 1,36 40 51 54,65 44 13 19,01 54 4 17,91 54 5 6,86	9,787 9,818 9,823 9,838 9,838 9,838	+9,9877 ,9533 ,933 ,9818 ,9818	+9,6265 ,5060 ,5339 ,5994 ,5994	0,9907 ,9920 ,9922 ,9929 ,9929	-9,9408 ,9404 ,9403 ,9401 ,9401	1871 1872 1873 1875 1875			- 6,48 + 0,13 + 3,22 + 2,60
971 972 973 974 975	55 0 54 13 8,11 49 30 19,50 42 29 57,87 49 2 58,56	9,889 9,894 9,889 9,884 9,945	+9,9823 ,9823 ,9745 ,9581 ,9731	+9,6067 ,6028 ,5744 ,5228 ,5739	0,9952 ,9954 ,9951 ,9949 ,9976	.—9,9394 ,9393 ,9394 ,9395 ,9386	1877 1881 1880 1879 1885	+ 4,30 - 0,79	-4,45 -1,55	- 2,16 - 1,22 + 0,67 + 2,43
976 977 978 979 980	33. 8 21,27 33. 3 33. 6 47,94 50. 8 15,63 54. 1 19,39	9,950 9,950 10,000 10,046 10,051	+9,9232 ,9232 ,9227 ,9740 ,9800	+9,4337 ,4346 ,4357 ,5853 ,6084	0,9978 0,9978 1,0000 1,0020 1,0022	-9,9386 ,9385 ,9378 ,9372 ,9371	1884 1886 1887 1888 1889	- 1,32 - 1,58 - 3,07 - 2,05	-3,97 -3,53 -4,70	$ \begin{array}{r} -2,22 \\ +8,09 \\ -0,89 \\ +1,53 \end{array} $
981 982 988 984 985	46 31 24,97 54 32 54 32 32,19 48 21 0,28 52 39 5,26	10,061 10,071 10,076 10,076 10,096	+9,9671 ,9800 ,9805 ,9703 ,9777	+9,5615 ,6122 ,6123 ,5749 ,6027	1,0026 ,0031 ,0033 ,0033 ,0042	—9,9369 ,9368 ,9367 ,9367 ,9364	1890 1893 1895 1894 1896	$ \begin{array}{r}     -1,86 \\     +5,60 \\     -2,55 \\  \end{array} $		+ 4,10 - 2,25 + 7,97
986 987 988 989 990	54 32 12,10 44 48 28,43 34 44 57,11 51 24 42,52 48 32 46,53	10,107 10,146 10,177 10,227 10,252	+9,9800 ,9619 ,9284 ,9745 ,9689	+9,6136 ,5525 ,4617 ,6014 ,5838	1,0045 ,0063 ,0076 ,0097 ,0:108	-9,9363 ,9357 ,9352 ,9345 ,9341	1897 1898 1901 1907 1908	$ \begin{array}{r} -1,71 \\ -1,62 \\ -2,21 \\ -1,95 \end{array} $	-0,31  -3,90 	$\begin{array}{r} -2,48 \\ +1,54 \\ -0,42 \\ +0,76 \\ +0,30 \end{array}$

NT .	NT.	2.0	No.	Right Ascen.	Annual		Logari	thms of	
No.	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	b	С	d
991 992 993 994 995	Argus	7.8 8 7 5.6 6.7	3 3 3 3 3	H. M. S. 8 3 7,75 3 47,88 4 14,36 4 23,06 4 34,06	**. + 2,262 1,468 1,692 1,787 1,847	-8,6204 ,7701 ,7493 ,7133 ,7031	+ 8,8444 ,9919 ,9688 ,9330 ,9215	+0,3545 ,1667 ,2019 ,2521 ,2665	+8,3792 ,6802 ,6468 ,5859 ,5664
996 997 998 999 1000	γ <sup>2</sup>	6.7 5.6 7.8 7.8 6	3 3 3 4	4 34.48 4 36,61 4 89,65 4 50,60 4 51,53	2,356 1,847 1,847 1,678 1,822	8,6092 ,7033 ,7035 ,7358 ,7089	+8,8273 ,9214 ,9215 ,9530 ,9260	+0,3722 ,2665 ,2665 ,2248 ,2605	+8,3324 ,5666 ,5669 ,6236 ,5764
1001 1002 1003 1004 1005		7 7.8 6.7 7 6.7	4 3 4 4 3	5 15.75 6 25,07 6 37,76 6 43,90 5 49,66	1,601 2,229 1,767 1,770 1,401	-8,7517 ,6344 ,7223 ,7222 ,7899	+8,9672 8,8491 8,9362 8,9354 9,0032	+0,2044 ,3480 ,2472 ,2480 ,1464	+8,6489 ,4071 ,5987 ,5981 ,7066
1006 1007 1008 1009 1010	B	6.7 5.6 5.6 7 7	3 3 3 4	6 17,77 6 20,60 6 21,84 6 31,23 7 18,30	2,426 1,029 1,805 2,226 2,248	-8,6035 ,8554 ,7178 ,6391 ,6378	+8,8143 9,0664 8,9285 8,8489 8,8443	+0,3849 ,0124 ,2565 ,3475 ,3518	+ 8,2954 ,7965 ,5887 ,4138 ,4056
1011 1012 1013 1014 1016		6.7 5.6 5.6 6.7	3 2 3 3 3	7 22,43 7 27,24 7 57,85 7 58,11 8 28,80	2,248 2,260 2,250 2,249 1,528	-8,6379 ,6360 ,6396 ,6399 ,7772	+8,8441 ,8419 ,8433 ,8436 ,9792	+0,3518 ,3541 ,3522 ,3520 ,1841	-+ 8,4056 ,3996 ,4071 ,4079 ,6834
1016 1017 1018 1019 1026	3	7 7.8 8 8 7.8	3 5	8 43,06 9 24,09 9 14,77 9 30,30 9 30,77	1,894 1,780 1,147 1,789 2,425	-8,7097 ,7334 ,8475 ,7322 ,6144	+8,9105 8,9317 9,0461 8,9300 8,8116	+0,2774 ,2504 ,0596 ,2526 ,3847	+8,5675 ,0096 ,7831 ,6072 ,3096
102 102 102 102 102	2	7.8 7.8 7.8 -7	3	10 30,38 10 45,22 10 45,21 10 10 47,40	1,788 1,798 2,624 1,176 1,911	-8,7364 ,7369 ,6022 ,7396 ,7105	+8,9297 ,9284 ,7947 ,9318 ,9057	+0,2524 ,2536 ,4021 ,0704 ,2813	+8,6122 ,6110 ,2415 ,6173 ,5691
102 102 102 102 102 103	7   8   9	7.8 7.8 7 8 7			1,786 1,790 2,433 2,525 2,057	-8,7387. ,7385 ,6192 ,051 ,6891	+8,9297 ,9288 ,8084 ,7937 ,8768	+0,2519 ,2528 ,3861 ,4023 ,3132	+8,6150 ,6143 ,3118 ,2448 ,5150
103 103 103 103	32 33 4	7.8 	2	11 51,30 11 12 23,27 12 28,81 12 40,62	1,936 2,290 1,850 1,360 1,163	8,7126 ,6466 ,7313 ,8231 ,8578	+ 8,9002 8,8327 8,9166 9,0081 9,0422	+0,2869 ,3598 ,2672 ,1035 ; 10056	+8,5641 ,4030 ,5985 ,7456 ,7934

	Declination	lanauA		Logarit	hms of		Differ	Right A	he Brisbane scension	[
No.	(South.) Jan. 1, 1840.	Precession	a'	<i>b'</i>	c'	d'	No.	fr M. C.	om   T.	Deelin.
991 992 993 994 996	34 59 26,02 54 21 42,23 52 9 7,48 48 12 54,58 46 52 33,80	10,272 10,312 10,352 10,347 10,372	+9,9289 ,9777 ,9760 ,9675 ,9647	+9,4684 ,6215 ,6106 ,6855 ,6772	-1,0117 ,0183 ,0160 ,0148 ,0168	—9,9338 ,9332 ,9326 ,9327 ,9323	1902 1911 1909 1913 1916	2,56 -44,27 -11,96 -2,97	3,13	+ 1,58 - 2,38 + 3,97 + 1,19 + 0,75
996 997 998 999 1000		10,377 10,377 10,377 10,392 10,392	+ 0,0374 9,9643 9,9643 9,9713 9,9662	+9,6429 ,5774 ,5776 ,6026 ,5823	1,0161 ,0161 ,0161 ,0167 ,0167	—9,9322 ,9322 ,9322 ,9320 ,9320	1915 1917 1918 1921 1920	3,23 2,30 2,66 3,99 2,83	$-\frac{2,91}{-2,46}$	$\begin{array}{r} -3,51 \\ -2,35 \\ -3,81 \\ +0,41 \\ +7,64 \end{array}$
1001 1002 1003 1004 1006	52 6 14,05 36 19 36,39 48 45 50,69 48 41 25,86 56 36 57,84	10,422 10,437 10,462 10,462 10,462	+9,9731 ,9325 ,9675 ,9671 ,9773	+9,6132 ,4893 ,6936 ,6936 ,6344	-1,0179 ,0186 ,0192 ,0196 ,0196	9,9316 ,9313 ,9311 ,9309 ,9309	1923 1924 1926 1927 1928	3,53   1,30   1,89   2,26   2,16		+ 6,91 + 1,87 + 7,79 + 18,03 3,09
1006 1007 1008 1009 1010	60 49 5,68 47 59 7,46 36 30 45,01	10,506 10,601 10,606 10,520 10,681	+9,9009 ,980 <b>0</b> ,9652 ,9325 ,9294	+9,4113 ,6004 ,5905 ,4949 ,4904	-1,0214 ,0212 ,0214 ,0221 ,0245	—9,9302 ,9303 ,9302 ,9300 ,9290	1932 1934 1931 1933 1936	- 1,89 2,06 2,49  - 1,94	— 1,99 —	+ 5,16 - 2,37 + 5,74 + 1,37 14,39
1011 1012 1013 1014 1016	35 25 12,94 35 60 27,98 35 51 33,98	10,585 10,590 10,630 10,680 10,659	+9,9289 ,9274 ,9284 ,9284 ,9727	+9,4904 ,4866 ,4921 ,4926 ,6320	—1,0247 ,0249 ,0265 ,0265 ,0277	—9,9290 ,9289 ,9283 ,9283 ,9278	1937 1938 1941 1942 1944	- 2,76 - 3,77 - 3,06 - 1,54 - 1,42	- 2,87	+ 0,12 + 0,32 + 2,09 + 3,36
1016 1017 1018 1019 1020	48 44 55,02 59 33 30,10 48 33 48,60	10,679 10,724 10,719 10,733 10,743	+9,9595 ,9643 ,9768 ,9638 ,9004	+9,5844 ,6047 ,6698 ,6038 ,4244	-1,0285 ,0303 ,0301 ,0307 ,0311	9,9275 ,9267 ,9268 ,9266 ,9264	1945 1949 1961 1962 1960	- 2,79 - 6,50 - 2,44 - 6,57 - 2,99		+ 2,83 +14,98 - 3,30 + 2,11 - 4,45
102 1023 1023 1024 1023	2 48 33 38,63 3 25 48 33,58 4 48 57	10,812 10,827 10,827 10,832 10,832	-+9,9628 ,9628 ,8791 ,9633 ,9566	+9,6078 ,6076 ,3718 ,6104 ,6884	-1,0339 ,0345 ,0346 ,0347 ,0347	-9,9263 ,9261 ,9261 ,9260 ,9260	1955 1967 1966 1958 1959	4,08 2,49 3,48 1,73	— 1,81 — —	$\begin{array}{c} + & 9,90 \\ + & 10,20 \\ - & 0,19 \\ \hline + & 5,60 \end{array}$
1020 1021 1021 1020 103	7   48 41 33,88 8   29 30 37,70 9   25 50 51,49	10,866 10,886 10,896	+9,9628 ,9624 ,8981 ,8785 ,9464		-1,0355 ,0361 ,0369 ,0372 ,0378	9,9246 ,9244 ,9241 ,9239 ,9237	1960 1961 1962 1963 1964	+ 0,20 - 4,86 - 1,37 - 2,07 - 3,15		- 3,81 + 0,51 - 4,03 - 6,07 + 0,16
103 103 103 103 103	2 34 47 3 47 25 32,24 4 56 46 34,71	10,939 10,959 10,959	,9723	,4935 ,6048 ,6604	—1,0378 ,0390 ,0396 ,0398 ,0402	,9228	1965 ,1966 1967 1969 1970	1,60 1,28	1	+ 2,64 - 0,56 - 2,84 + 1,08

No.	Names,	Mon	No.	Right Ascen.	Annual		Logari	ithms of	بارام (ب. ا <del>لدموس</del> و و <del>الاستسواد السواد</del>
110.	radies,	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	b	0	d
1036 1037 1038 1039 1040	Argus	7 7 8.7 7 7	3 3 3 3 3 3	H. M. 8. 8 13 38,80 13 46,88 13 57,08 14 1,08 14 10,40	.8 + 1,971 2,449 1,885 1,927 1,843	-8,7124 •,6240 ,7300 ,7221 ,7387	+8,8924 ,8035 ,9090 ,9007 ,9168	+0,2947 ,3890 ,2753 ,2849 ,2665	+8,5584 ,3103 ,6023 ,5768 ,6078
1041 1042 1043 1044 1046	Argus	6.7 7 7.8 7 6	න න න න	14 39,12 14 59,29 16 1,00 15 13,86 16 18,61	1,240 1,788 1,167 2,005 2,262	8,8519 ,7523 ,8677 ,7109 ,6620	+9,0284 8,9272 9,0426 8,8847 8,8352	+0,0934 ,2524 ,0630 ,3021 ,3545	+8,7835 ,6304 ,8045 ,8045 ,5509 ,4312
1048 1047 1048 1049 1050	Argus	7.8 6.7 6.7 7	33333	15 18,80 15 29,95 15 37,34 16 44,75 16 8,80	1,160 1,676 2,167 2,164 1,980	8,8690 ,7767 ,6810 ,6820 ,7190	+9,0419 8,9484 8,8631 8,8536 8,8889	+0,0646 ,2243 ,3639 ,3363 ,2967	+8,8058 ,6600 ,4811 ,4851 ,6646
1051 1052 1053 1064 1065	Argus	9 7 6.7 7	33533	16 12,05 16 21,18 16 16 21,38 16 33,01	2,059 2,401 1,688 1,981 1,666	-8,7037 ,6402 ,7937 ,7198 ,7814	+8,8734 ,8094 ,9652 ,8887 ,9497	+0,3137 ,3804 ,2008 ,2969 ,2217	+ 8,5592 ,3535 ,6972 ,5056 ,6764
1066 1067 1058 1059 1060	Argus	6.7 7 7	333333	16 35,90 16 46,16 16 53,39 17 12,65 17 12,80	1,182 1,648 2,497 2,434 1,873	8,8694 ,7853 ,6261 ,6374 ,7437	+9,0377 8,9631 ,7924 ,8027 ,9093	+0,0726 ,2170 ,3974 ,3863 ,2726	2808,8+ 6240, 0482, 1662, 1663, Keog,
1061 1062 1063 1064 1065	Argus	7 8.9 7.8 7.8	33433	17 18,26 17 38,41 17 43,90 17 45,63 18 2,04	1,988 1,338 1,867 1,821 1,988	8,7214 ,8459 ,7488 ,7668 ,7239	+8,8864 9,0098 8,9122 8,9192 8,8862	+0,2984 ,1265 ,2688 ,2603 ,2984	+8,5060 ,7718 ,6179 ,6306 ,5093
1066 1067 1068 1069 1070		8 6.7 6.7 7.8 6.7	433333	18 13,64 18 26,63 19 26,67 19 40,64 20 15,14	1,983 ( 1,678 ( 2,072 ( 1,516 ( 2,469 (	8,7290 ,7856 ,7122 ,8210 ,6406	+8,8910 ,9463 ,8686 ,9766 ,7987	+0,2929 ,2248 ,3164 ,1807 ,3925	+8,6794 ,6800 ,6300 ,7332 ,3222
1071 1072 1073 1074 1076	Argus	6.7 6.7 6.7 7 6.7	3 3 3 4	20 39,24 20 64,62 21 6,44 21 6,52 21 7,91	1,516 2,574 2,545 2,086 1,513	8,8244 ,6259 ,6308 ,7148 ,8268	+8,9703 ,7764 ,7805 ,8646 ,9766	+0,1807 ,4106 ,4057 ,3193 ,1798	+8,7371 ,2417 ,2667 ,8404 ,7400
1076 1077 1078 1079 1080	Argu	2.	3 2 3	21 10,64 21 29,26 21 21 42,36 21 45,25	1,860 1,874 1,514 2,028 1,817	-8,7598   ,7577   ,8277   ,7284   ,7702	+8,9095 ,9066 ,9763 ,8757 ,9178	+0,2695 ,2728 ,1801 ,3071 ,2093	+8,6305 ,6262 ,7409 ,5678 ,6479

	Declination.	A1		Logarit	hms of		Diffe		he Brisbane scension	Catalogue.
No.	(South.) Jan. 1. 1840	Annual Precession	a'	<i>b'</i>	c'	$\overline{d'}$	No.	fro M. C.	om T.	Declin.
1036 1037 1038 1039 1040	44 32 13,78 29 2 21,57 46 42 38,56 45 42 18,40 47 41 48,80	-11,047 11,057 11,067 11,072 11,081	+9,9513 ,8943 ,9562 ,9538 ,9581	+9,5874 ,4279 ,6043 ,5970 ,6118	-1,0432 ,0436 ,0440 ,0442 ,0446	9,9214 ,9212 ,9210 ,9209 ,9208	1973 1974 1975 1976 1977		$-\frac{1,49}{-2,71}$	+ 1,56 - 3,45 + 5,21 + 2,15 + 4,21
1041 1042 1043 1044 1044	57 39 55,40 49 2 1,78 59 48 53,58 43 44 59,43 35 58 42,00	11,110 11,139 11,139 11,158 11,168	+9,9713 ,9600 ,9713 ,9482 ,9238	+9,6754 ,6230 ,6817 ,5856 ,5153	1,0457 ,0468 ,0468 ,0468 ,0480	-9,9203 ,9198 ,9198 ,9194 ,9192	1978 1980 1981 1982 1983	- 2,39 - 1,65 - 3,03 - 1,43 - 1,96	- 2,46 - 1,35	+ 3,64 + 3,26 - 5,23 + 4,65 + 0,70
1046 1047 1048 1049 1050	59 48 40,29 51 26 23,15 39 6 49,80 39 12 30,90 44 28 58,61	11,178 11,178 11,187 11,197 11,226	+9,9713 ,9853 ,9350 ,9345 ,9499	+9,6830 ,6397 ,5409 ,5482 ,5940	1,0482 ,0484 ,0487 ,0491 ,0502	9,9192 ,9191 ,9189 ,9187 ,9182	1987 1985 1984 1986 1989			+ 7,17 + 5,18 + 3,44 + 5,47 + 0,65
1051 1052 1053 1054 1055	53 11 1,42 44 29 44,44	11,231 11,241 11,198 11,246 11,255	+9,9440 ,9025 ,9652 ,9489 ,9628	+9,5769 ,4622 ,6507 ,5948 ,6444	-1,0504 ,0508 ,0491 ,0510 ,0513	-9,9181 ,9180 ,9187 ,9179 ,9177	1990 1991 1992 1993 1994	$-\frac{3,32}{2,14}$	<u>2,58</u>	+ 3,00 - 2,06 - 1,23 + 9,86 + 6,62
1056 1057 1058 1059 1060	52 4 42,81 27 18 29,82 29 52 50,87	11,255 11,265 11,289 11,308 11,304	4-9,9699 ,9628 ,8837 ,8960 ,9547	+9,6853 ,6469 ,4127 ,4491 ,6174	1,0513 ,0517 ,0526 ,0534 ,0532	-9,9177 ,9175 ,9171 ,9168 ,9169	1996 1995 1997 1999 2000	-5,38 $-0,71$		- 6,47 + 0,19 + 1,05 + 5,60 + 1,56
1061 1062 1063 1064 1065	57 27 49,11 47 41 54,35 48 22 25,26	11,313 11,332 11,342 11,342 11,361	+9,9484 ,9675 ,9552 ,9566 ,9479	+9,5964 ,6783 ,6219 ,6275 ,5989	-1,0536 ,0543 ,0547 ,0547 ,0554	—9,9167 ,9163 ,9162 ,9162 ,9158	2001 2006 2004 2006 2009		- <u>1,90</u>	+ 3,91 - 0,33 + 2,05 + 2,61 + 2,89
1066 1068 1068 1069	51 36 39,47 3 42 15 7,70 54 48 11,99	11,366 11,390 11,466 11,481 11,524	+9,9489 ,9609 ,9405 ,9633 ,8887	+9,6040 ,6489 ,5862 ,6703 ,4413	-1,0556 ,0565 ,0594 ,0600 ,0616	-9,9157 ,9153 ,9139 ,9136 ,9128	2010 2011 2013 2014 2016	$\begin{array}{c c} -2,02 \\ -1,56 \\ +2,82 \end{array}$	3,62	- 7,06 + 5,64 + 0,05 - 3,44 + 3,20
1071 1072 1073 1074 1074	2 24 21 56,53 3 25 36 26,37 4 41 59 59,47	11,548 11,671 11,586 11,581 11,581	+9,9628 ,8645 ,8716 ,9385	+9,6732 ,3772 ,3978 ,5875 ,6750	-1,0625 ,0634 ,0639 ,0637 ,0637	-9,9124 ,9119 ,9117 ,9117 ,9117	2021 2020 2024 2025 2027	- 1,04	$ \begin{array}{r} -0.02 \\ -3.21 \\ -3.51 \end{array} $	+ 0,42 4,60 5,08 + 2,80 + 0,88
1070 1071 1073 1073 1086	7   47 34 32,81 8   54 57 9   43 42 22,81	11,600 11,605 11,628	+9,9528 ,9518 ,9619 ,9430 ,9648		,0655	,9113	2026 2028 2029 2080 2081	$-\frac{1,50}{-0,66}$		$ \begin{array}{c} + 6,20 \\ + 60,15 \\ \hline + 1,21 \\ + 8,93 \end{array} $

No	N	165	No.	Right Ascen.	Annual		Logarit	hme of	
Νo.	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	ь	£	d
1081 1082 1083 1084 1085	Argus	7.8 6 7 7 7.8	3 3 3 3 3	H. M. s. 8 21 54,78 22 0,73 22 20,16 22 23,07 22 27,08	s. +1,352 1,661 2,133 1,745 1,728	—8,8592 ,8018 ,7094 ,7867 ,7901	-+9,0060 8,9480 ,8545 ,9315 ,9347	+0,1310 ,2204 ,3290 ,1467 ,2375	+8,7859 ,7001 ,5240 ,6748 ,6804
1086 1087 1088 1089 1090	Argus	6 7.8 7 7.8 7.8	4 3 6 3 8	22 32,83 22 32,64 22 43,34 22 46,75 22 54,22	1,668 1,670 1,528 2,031 1,528	-8,8022 ,8022 ,8296 ,7312 ,8296	+8,9463 ,9460 ,9731 ,8744 ,9731	+0,2222 ,2227 ,1841 ,3077 ,1841	-1-8,6999 ,0999 ,7421 ,5707 ,7421
1091 1092 1093 1094 1095	Argus	7.8 7 7	1 333 1	22 22 65,11 23 17,61 23 19,92 23	1,528 2,137 2,091 1,550 1,524	-8,8303 ,7107 ,7209 ,8276 ,8328	+8,9730 ,8632 ,8621 ,9687 ,9736	+0,1841 ,3298 ,3203 ,1903 ,1830	+8,7429 ,5247 ,5470 ,7383 ,7460
1096 1097 1098 1099 1100		6 7.8 6 6 7.8	3 3 2 3	23 41,22 23 40,80 24 1,20 24 4,07 25 28,85	2,036 1,728 1,892 2,017 1,545	-8,7331 ,7943 ,7631 ,7381 ,8333	+8,8727 ,9341 ,9013 ,8763 ,9699	+0,3088 ,2376 ,2769 ,3047 ,1889	+8,5721 ,6858 ,6802 ,5816 ,7442
1101 1102 1103 1104 1105	Argus	7 7 7 7 7	2 3 3 1 3	24 40,89 24 48,28 24 52,31 25 15,43 25 12,39	1,891 2,164 2,165 2,020 2,211	-8,7657 ,7113 ,7115 ,7409 ,7034	+ 8,9012 ,8463 ,8460 ,8749 ,8367	+0,2767 ,3077 ,3356 ,3053 ,3446	+8,6334 ,5194 ,5195 ,5844 ,4977
1106 1107 1108 1109 1110		7 6.7 6.7 7.8	3 4 4 3 3	25 13,64 25 28,74 25 30,78 25 34,14 25 49,11	1,602 1,651 2,211 1,767 1,573	8,8241 ,8349 ,7042 ,7937 ,8319		+0,2047 ,2176 ,3446 ,2472 ,1967	+8,7304 ,7465 ,6961 ,6807 ,7415
1111 1112 1113 1114 1116	Pixid. Nant.	7.8 6.7 7 6.7	4 3 3 3 2	26 2,99 26 5,93 26 19,34 26 37,04 26 43,40	2,213 1,903 1,985 2,424 2,348	-8,7056 ,7679 ,7519 ,6673 ,6825	+8,8356 ,8979 ,8811 ,7950 ,8099	+0,8450 ,2794 ,2978 ,3845 ,3698	-1-8,6092 ,6345 ,6034 ,3794 ,4814
1116 1117 1118 1118 1120		7.8 6.7 6 7.8 7.8	3 3 3 5 3	27 29,38 27 38,31 27 42,61 27 43,26 27 46,74	1,835 1,666 2,224 1,992 1,920	8,7861 ,8204 ,7082 ,7553 ,7699	4-8,9106 ,9441 ,8319 ,8787 ,8983	+0,2636 ,2217 ,3471 ,2993 ,2833	+8,6645 ,7210 ,5006 ,6066 ,6346
1121 1122 1123 1124 1126		7 7.8 7 6.7	3 3 3 9 3	28 6,84 28 15,64 28 25,00 28 26,83 28 33,24	2,083 1,975 1,569 2,261 1,550	8,6982 ,7004 ,8418 ,7005 ,8457	4-8,8200 ,8817 ,9666 ,8250 ,9663	+0,3617 ,2956 ,1966 ,3543 ,1903	+8,4714 ,6152 ,7530 ,4808 ,7578

Na	Declination	Anuual		Logarit	hms of		Differ	ence from the Right A	he Brisbane scension	Catalogua.
No.	(South.) Jan. 1. 1840.	Precession	a'	<i>b</i> ′	ε'	d'	No.		om   T.	Declin.
1081 1082 1083 1084 1085	57 36 35,06 52 16 58,81 40 43 7,05 50 36 11,59 50 56 54,41	-11,638 11,647 31,666 11,671 11,67	+9,9638 ,9586 ,9345 ,9557 ,9562	+9,6906 ,6626 ,5796 ,6533 ,6557	-1,0659 ,0662 ,0669 ,0671 ,0673	-9,9107 ,9105 ,9101 ,9100	2033 2034 2035 2036 2036	- 2,43	3.	+ 2,54 - 0,58 - 6,29 - 5,75 + 3,13
1086 1087 1088 1089 1090	52 10 33,95 52 9 36,14 54 50 16,17 43 41 36,72 54 48 25,64	11,685 11,690 11,695 11,700 11,695	4-9,9581 ,9181 ,9609 ,9420 ,9609	+0,0634 ,6635 ,6785 ,6058 ,6785	1,0676 ,0678 ,0680 ,0682 ,0680	9,9098 ,9097 ,9096 ,9095 ,9096	2039 2040 2042 2041 2041 2044			$\begin{array}{r} + 6,49 \\ +49,20 \\ + 2,76 \\ \hline - 7,31 \\ + 8,25 \end{array}$
091 1092 1093 1094 1095	54 49 40 38 45,68 42 3 26,01 54 29 0,99 54 57	11,709 11,714 11,737 11,737 11,742	+9,9809 ,9335 ,9370 ,9600 ,9605	+9,6792 ,5808 ,5937 ,6783 ,6810	—1,0685 ,0687 ,0696 ,0696 ,0697	9,9093 ,9092 ,9088 ,9088 ,9087	2045 2043 2046 2049 2060		-3,88	- 1,91 + 1,58 + 14,04
1096 1097 1098 1099 1100	43 37 40,59 51 14 24,66 47 23 48,71 44 11 31,27 54 39 21,48	11,766 11,761 11,789 11,789 11,818	+9,9410 ,9557 ,9489 ,9420 ,9590	+9,6077 ,6595 ,6366 ,6130 ,6823	-1,0706 ,0704 ,0715 ,0715 ,0725	9,9082 ,9083 ,9078 ,9078 ,9072	2051 2052 2056 2056 2059	$ \begin{array}{r} -3,07 \\ -3,12 \\ -2,13 \\ \hline +61,11 \end{array} $	$ \begin{array}{r rrrr}  & -2,40 \\  & -1,21 \\  & -3,44 \\ \hline \end{array} $	$ \begin{array}{r} -4,57 \\ -9,55,54 \\ +2,77 \\ +10,02 \end{array} $
1101 1102 1103 1104 1105	47 29 31,74 39 58 40,87 39 57 56,15 44 12 2,17 38 31 26,32	11,836 11,846 11,855 11,865 11,874	+9,94 44 ,9294 ,9294 ,9410 ,9253	+9,6390 ,5797 ,5799 ,6158 ,5671	-1,0732 ,0736 ,0739 ,0742 ,0746	9,9068 ,9067 ,9065 ,9063 ,9061	2060 2061 2062 2063 2064	- 1,94 2,16 2,75 13,53 3,18		+ 5,44 - 4,93 - 5,05 -26,23 - 0,49
1106 1107 1108 1109 1110	53,40 37,19 54 39,23,93 38,31 32,51 60,26 8,20 54 17 28,78	11,869 11,888 11,897 11,902 11,912	+0,9571 ,9581 ,9248 ,9523 ,9571	+9,6788 ,6848 ,5682 ,6608 ,6836	-1,0744 ,0761 ,0754 ,0766 ,0760	9,9062 ,9058 ,9056 ,9055 ,9054	2065 2067 2066 2069 2070	- 2,57 - 3,01 - 1,55 - 5,07	- 0,10 - 0,13	+ 4,21 - 6,66 +11,99 - 1,03 - 4,74
1111 1112 1113 1114 1115	38 31 35,87 47 19 41,40 45 14 46,61 30 59 34,21 34 5 30,68	11,935 11,935 11,949 11,977 11,982	+0,9243 ,9469 ,9490 ,8949 ,9079	+9,5695 ,6415 ,6269 ,4885 ,5255	1,0768 ,0768 ,0773 ,0783 ,0785	9,9049 ,9049 ,9046 ,9040 ,9040	2071 2072 2074 2076 2077	1,63 3,70 0,38		+ 5,96 + 4,67 + 1,34 + 9,04 - 0,86
1116 1117 1118 1119 1120	49 3 29,55 52 40 10,78 38 18 13,59 45 12 38,12 47 3 42,58	12,033 12,047 12,047 12,053 12,053	+ 9,9484 ,9538 ,9222 ,9410 ,9445	+9,6568 ,6796 ,5714 ,6304 ,6438	-1,0804 ,0809 ,0809 ,0810 ,0810	—9,9029 ,9026 ,9026 ,9025 ,9025	2080 2083 2081 2082 2084	- 2,63 - 3,38 - 1,70 - 2,87	<b>2,</b> 93	+ 1,37 + 2,37 + 7,28 - 2,34 + 3,73
1121 1122 1123 1124 1125	36 21 45,52 45 42 11,38 55 34 51,85 37 3 52,55 55 55 35,83	12,079 12,089 12,098 12,033 12,103	+9,9149 ,9416 ,9547 ,9180 ,9547	+9,5583 ,6353 ,6920 ,5587 ,6941	-1,0820 ,0824 ,0827 ,0804 ,0829	9,9020 ,9018 ,9016 ,9029 ,9015		1,83 - 1,93 -63,26 - 3,37		+ 0,76 - 0,66 - 0,49 - 2,15 - 2,57

No.	Names,	Mag	No	Right Ascen.	Annual		Loga	rithms of	<del></del>
		"	ОЬя.	Jan. 1, 1840.	Precesn.	a	b	С	d
1126 1127 1128 1129 1130	Argus	7.8 7 6.7 6.7 6.7	3 3 3 3 3 3	H. M. s. 8 28 51,35 29 7,07 29 20,11 29 40,25 29 44,16	+ 2,000 2,051 2,195 1,684 1,779	-8,7570 ,7475 ,7192 ,8236 ,8051	+8,8762 ,8657 ,8363 ,9396 ,9207	,3120 ,3414 ,2263	+8,6072 ,5872 ,5221 ,7232 ,6930
1131 1132 1133 1134 1135	C Argus	6 7.8 8 7.8 6	33333	29 50,38 30 17,55 30 42,49 30 45,99 31 5,50	1,830 1,931 1,749 1,975 1,790	8,7949 ,7758 ,8141 ,7685 ,8072	+8,9102 ,8893 ,9260 ,8801 ,9175	+0,2624 ,2858 ,2428 ,2956 ,2528	+8,6754 ,6402 ,7064 ,6251 ,6942
1140	Argus  e <sup>1</sup> e <sup>2</sup>	7.8 7 7.8 6 6	32333	\$1 16,68 31 30,65 31 30,98 31 32,56 31 33,16	1,584 2,065 1,939 1,401 1,414	8,8481 ,7523 ,7782 ,8843 ,8819	+8,9584 ,8611 ,8870 ,9930 ,9906	+0,1998 ,3149 ,2876 ,1464 ,1504	+8,7591 ,5908 ,6421 ,8112 ,8078
1141 1142 1143 1144 1145	Argus	7 7.8 7 7.8	3 4 3 3	31 35,29 31 32 11,85 33 0,72 33 2,54	1,919 1,443 1,863 2,498 1,839	-8,7826 ,8764 ,7959 ,6724 ,8037	4-8,8909 ,9851 ,9021 ,7749 ,9065	+-0,2831 ,1593 ,2702 ,3976 ,2646	+8,6526 ,8000 ,6729 ,3515 ,6850
1146 1147 1148 1149 1150	Pixid. Naut. Argus	7 7.8 6.7 8.9 7	3 3 2 5	33 15,04 33 26,38 34 12,13 94 39,51 34 39,99	2,305 1,602 1,704 2,135 2,134	-8,7090 ,8525 ,8347 ,7476 ,7479	+8,8108 ,9537 ,9331 ,8439 ,8441	+0,3627 ,2047 ,2315 ,3293 ,3292	+8,4789 ,7629 ,7345 ,5716 ,5721
1151 1152 1153 1164 1155	Argus	6.7 8 7 6	3 3 3 -	34 54,10 35 0,91 35 5,75 35 8,18 35	1,691 2,137 1,916 2,040 1,711	8,8400 ,7483 ,7945 ,7688 ,8369	+ 8,9355 ,8433 ,8893 ,8635 ,9311	+0,2281 ,3298 ,2824 ,3096 ,2332	+8,7417 ,6721 ,6649 ,6156 ,7365
1156 1157 1158 1159 1160	Argus	5.6 7.8 7 5.6 6	5 3 4 3	35 23,94 35 26,48 35 35,50 35 42,58 35 43,20	1,712 1,765 1,673 1,720 1,716	8,8371 ,8266 ,8456 ,8365 ,8375	+8,9308 ,9200 ,9385 ,9290 ,9299	+0,2335 ,2467 ,2235 ,2355 ,2345	+8,7365 ,7195 ,7496 ,7352 ,7368
1161 1162 1163 1164 1165	Pixid. Naut.	7 7 6.7 7.8 6.7	2 3 3 2 3 .	\$5 43,82 35 44,70 35 49,28 35 52,09 35 58,64	2,427 1,927 1,285 1,934 1,964	-8,6926 ,7948 ,9204 ,7931 ,7873	+8,7847 8,8865 9,0126 8,8850 8,8786	+0,3851 ,2849 ,1089 ,2865 ,2931	+8,4129 ,6632 ,8570 ,6608 ,6497
1166 1167 1168 1169 1170	Argus	6 7 7 5.6 6.7	3 3 2 3 3	36 1,04 36 3,31 36 6,32 36 30,87 36 49,00	1,900 1,954 2,051 2,037 1,474	-8,8005 ,7894 ,7695 ,7740 ,8887	+8,8919 ,8806 ,8604 ,8628 ,9770	+0,2787 ,2909 ,3120 ,3090 ,1685	+8,6741 ,6537 ,6147 ,6225 ,8123

	Declination	1 1		Logarii	hms of		Differ		e Brisbane	Catalogue.
No.	(South.) Jan. 1. 1840.	Annual Precession	a'	<i>b</i> ,	c,	d'	No.	fire	scension   om     T.	Declin.
1126 11 <b>9</b> 7 1128 1129 1130	6 / " 45 5 19,80 43 43 11,80 39 25 25,17 52 31 22,80 50 32 41,00	"  12,126   12,145   12,163   12,182   12,191	+9,9395 ,9365 ,9243 ,9513 ,9489	+9,6320 ,6221 ,5860 ,6834 ,6719	1,0837 ,0844 ,0850 ,0857 ,0860	-9,9010 ,9006 ,9002 ,8998 ,8997	2092 2093 2094 2095 2097	- 3,24 - 3,53 - 2,84		+ 6,72 - 1,33 - 0,82 + 4,15 + 2,12
1131 1132 1133 1134 1135	49 23 41,36 47 1 12,62 51 16 10,81 45 56 55,35 50 25 2,23	12,196 12,223 12,256 12,263 12,283	+9,9161 ,9425 ,9484 ,9400 ,9169	+9,6648 ,6498 ,6786 ,6433 ,6744	1,0862 ,0873 ,0483 ,0885 ,0893	—9,8996 ,8989 ,8983 ,8982 ,8977	2099 2101 2103 2104 2106	2,85 2,63	- 2,10 - 3,65	+ 0,64 + 3,73 + 2,69 + 4,18 - 1,14
1136 1137 1138 1139 1140	54 33 0,23 43 33 30,76 46 56 40,80 57 40 17,31 57 27 21,44	12,283 12,311 12,311 12,311 12,311	+0,9523 ,9335 ,9410 ,9538 ,9533	+9,6984 ,6268 ,6523 ,7153 ,7143	1,0893 ,0903 ,0903 ,0903 ,0903	9,8977 ,8971 ,8971 ,8971 ,8971		-3,30 $-3,60$ $-2,42$	- 3,64 - 3,14	+ 0,46 + 1,20 + 3,79 + 1,19 + 3,17
1141 1142 1143 1144 1146	47 26 34,91 56 59 48 52 3,61 28 31 7,70 49 31 20,17	12,316 12,311 12,357 12,421 12,417	+9,9415 ,9533 ,9435 ,8779 ,9440	+9,6569 ,7120 ,6670 ,4714 ,6733	1,0904 ,0903 ,0919 ,0942 ,0940	-9,8970 ,8971 ,8961 ,8947 ,8948	$\begin{bmatrix} 2111 \\ 2115 \end{bmatrix}$	- 3,86 - 0,63	+ 1,59	+ 3,60 + 9,60 + 3,96 + 1,14
1146 1147 1148 1149 1150	54 26 6,74 52 31 42,39 41 47 17,46	12,436 12,444 12,494 12,531 12,531	+9,9096 ,9494 ,9469 ,9268 ,9263	+9,5626 ,7034 ,6945 ,6200 ,6203	-1,0946 ,0949 ,0967 ,0980 ,0980	9,8944 ,8942 ,8931 ,8923 ,8923	2123 2126 2130 2133 2134	-1,62 $-1,31$ $-2,68$	- 3,66 3,84	- 0,33 - 3,28 + 1,97 - 0,63 - 2,12
1161 1162 1163 1164 1166	41 46 28,68 47 52 46,36 44 37 30,06	12,544 12,553 12,568 12,568 12,567	+9,9464 ,9258 ,9390 ,9330 ,9466	49,6983 ,6207 ,6674 ,6438 ,6969	-1,0984 ,0988 ,0989 ,0989 ,0992	-9,8920 ,8918 ,8917 ,8917 ,8916	2138 2137 2139 2140 2140	7 - 3.38 9 - 2.64 9 - 2.67		+ 2,85 + 3,90 + 3,95 + 1,17
1156 1157 1158 1159 1160	61 22 32,14 53 17 2,85 52 21 19,94	12,676 12,581 12,590 12,599 12,599	+9,9466 ,9440 ,9460 ,9450	+9,6971 ,6907 ,7031 ,6971 ,6977	1,0995 ,0997 ,1000 ,1003 ,1003	,8912 ,8910 ,8908	214	$3   -1,85 \\ 8   -2,39$		+ 1,47 + 5,35 + 2,52 + 5,23 + 3,61
1161 1162 1163 1164 1166	2 47 39 24,42 3 69 46 11,73 1 47 29 54,60	12,603 12,603 12,608	+9,8904 ,9380 ,9499 ,9376 ,9360	,7361 ,6666	,1006 ,1006	,8907 ,8907 ,8906	214 215 215	$\begin{vmatrix} 7 & -2.02 \\ 3 & -2.62 \end{vmatrix}$		- 4,15 + 2,67 - 2,61 + 6,99 + 3,69
1166 1168 1168 1169	7 47 0 21,29 6 44 25 22,34 9 44 50 27,62	12,621 12,626 12,662	,9320	,6634 ,6445 ,6490	,101   ,1013   ,1026	8903 8903 5   8903 5   8894	5.    218 2:    218 1.    214	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 5 7	+ 4,25 + 1,01 + 2,36 + 1,45 + 1,47

No.	No. 122	Mass	No.	Right Ascen.	Annual		Logarit	hms of	
110,	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	а	Ь	С	d
1171 1172 1173 1174 1175	d Argus	6 6 7,8 7,8	33233	n. M. s. 8 37 4,60 37 5,90 37 11,93 37 24,77 37 30,30	s 1,332 1,937 1,720 1,937 1,990	-8,9163 ,7961 ,8414 ,7975	+9,0036 8,8834 8,9282 8,8832 8,8721	+0,1245 ,2871 ,2355 ,2871 ,2988	+8,8504 ,6641 ,7410 ,6658 ,6455
1176 1177 1178 1179 1180	Argus	7.8 7 6.7 6.7 7.8	2 3 4 3 3	37 33,69 37 41,18 37 44,08 37 50,52 38 4,02	1,727 2,036 1,721 1,721 1,953	8,8414 ,7775 ,8430 ,8435 ,7958	+8,9266 ,8621 ,9277 ,9276 ,8795	+0,2373 ,3088 ,2358 ,2358 ,2907	-1-8,7404 ,6270 ,7428 ,7433 ,6617
1181 1182 1183 1184 1185	Argus D	7.8 7.8 9 8 6.7	33353	38 11,87 38 22,53 38 23,50 38 28,24 38 38,07	2,293 1,693 1,970 1,994 2,433	8,7256 ,8509 ,7935 ,6889 ,6992	-+8,8082 ,9330 ,8756 ,8704 ,7803	+0,3604 ,2287 ,2945 ,2997 ,3861	-1-8,6048 ,7543 ,6566 ,6475 ,4195
1186 1187 1188 1189 1190	Argus	6 7.8 6.7 7.8 7.8	3 4 3 3	38 39,95 38 40,03 38 42,05 38 49,03 39 2,77	1,874 1,768 2,305 1,778 1,706	-8,8145 ,8364 ,7245 ,8348 ,8501	-1-8,8956 ,9174 ,8053 ,9153 ,9298	+0,2728 ,2476 ,3627 ,2499 ,2320	+ 8,6940 ,7308 ,4998 ,7280 ,7522
1191 1192 1193 1194 1196	Pixid, Naut, Argus Pixid Naut, Argus	7 8 6.7 8	3 3 - 3	39 18,85 39 19,17 39 26,22 39 40 11,86	2,567 1,952 2,437 1,955 1,735		-+8,7654 ,8786 ,7785 ,8775 ,9235	+0,4094 ,2905 ,3869 ,2911 ,2393	+8,8200 ,6676 ,4201 ,6695 ,7479
1196 1197 1198 1199 1200	Pixid. Naut. Argus	7 6.7 6 7.8 7.8	3 3 3 3	40 28,29 40 32,66 40 36,93 40 48,87 41 2,96	2,378 2,194 2,030 2,150 1,976	-8,7150 ,7529 ,7878 ,7630 ,8007	+8,7889 ,8265 ,8612 ,8356 ,8723	+0,3762 ,3412 ,3076 ,3324 ,2958	+8,4631 ,5660 ,6410 ,5885 ,6648
1201 1202 1203 1204 1205	Argus  Pixid. Naut.  Argus	7.8 6.7 7.8 7	3 3 3 2	41 4,57 41 4,68 41 18,16 41 24,98 41 28,89	1,745 2,036 1,427 2,411 1,599	-8,8492 ,7878 ,9128 ,7112 ,8802	+8,9208 ,8594 ,9838 ,7812 ,9503	+0,2418 ,3088 ,1544 ,3822 ,2038	+8,7481 ,6400 ,8420 ,4453 ,7952
1206 1207 1208 1209 1210	Argus	6.7 6.7 8 6.7	3 3 5	41 41,60 41 41 53,50 42 13,27 42 23,24	2,156 2,156 2,031 2,130 2,159	-8,7641 ,7647 ,7914 ,7717 ,7660	+ 8,8334 ,8334 ,8599 ,8387 ,8322	+0,3336 ,3336 ,3077 ,3284 ,3342	+8,5887 ,5895 ,6453 ,5037 ,5907
1211 1212 1213 1214 1215	Argus  f  Pixid. Naut  Argus	7.8: 6: 7.8: 7.8: 7.8:	3 3 4 3	42 26,76 42 34,28 42 44,78 42 52,23 43 18,60	1,800 1,554 2,162 2,475 1,761	-8,8420 ,8926 ,7663 ,7027 ,8530	+8,9085 ,9586 ,8312 ,7673 ,9161	+0,2553 ,1914 ,3349 ,3936 ,2458	+8,7347 ,8122 ,5904 ,4062 ,7512

	Declination.	Annual	<u> </u>	Logari	thms of		Diffe		he Brisbane scension	Catalogue,
No.	(South.) Jan. 1. 1840.	Precession	a'	b'	c'	d'	No.		om	Declin.
1171 1172 1178 1174 1175	69 11 28,48 47 31 35,22 52 29 29,84 47 35 25,60 46 14 12,25	-12,689 12,689 12,698 12,716 12,721	+9,9479 ,9366 ,9435 ,9360 ,9336	+9,7356 ,6695 ,7014 ,6708 ,6613	1,1034 ,1034 ,1037 ,1044 ,1045	—9,8887 ,8887 ,8885 ,8881 ,8880	2163 2161 2162 2164 2165	s. - 4,29 - 3,43 - 2,48 - 2,29	1,35	+ 5,53 + 4,62 + 6,43 + 1,97 + 4,61
1176 1177 1178 1179 1180	52 23 45,94 44 59 16,46 52 31 39,75 52 32 28,82 47 13 54,96	12,725 12,734 12,734 12,743 12,752	+ 9,9430 ,9309 ,9430 ,9430 ,9360	+9,7017 ,6525 ,7028 ,7032 ,6696	—1,1047 ,1050 ,1050 ,1053 ,1066	9,8879 ,8877 ,8877 ,8875 ,8873	2166 2167 2168 2169 2170	- 1,32 - 2,36 - 2,76 - 2,04 - 7,33	- 2,12 - 1,47	+ 2,92 + 1,66 + 3,18 + 6,93 + 1,40
1181 1182 1183 1184 1186	\$6 56 59,16 53 10 30,78 46 49 35,00 46 13 20,64 \$1 40 0,83	12,770 12,779 12,779 12,779 12,788 12,797	+9,9085 ,9430 ,9340 ,9325 ,8882	+9,5834 ,7080 ,6676 ,6635 ,5255	-1,1062 ,1065 ,1065 ,1068 ,1071	—9,8869 ,8867 ,8867 ,8865 ,8863	2172 2174 2173 2175 2176	- 2,81 - 2,60 - 1,39 - 2,49 - 3,29		$\begin{array}{c c} + & 1,27 \\ -12,69 \\ + & 6,99 \\ + & 3,11 \\ - & 6,19 \end{array}$
1186 1187 1188 1189 1190	49 14 44,77 51 38 1,08 36 34 7,78 51 25 42,56 52 56 44,89	12,797 12,801 12,801 12,806 12,820	+9,9375 ,9405 ,9063 ,9405 ,9416	+9,6847 ,6996 ,5806 ,6987 ,7081	1,1071 ,1071 ,1073 ,1074 ,1079	-9,8863 ,8863 ,8861 ,8860 ,8867	2180 2181 2178 2183 2185		$-\frac{3,40}{2,31}$	+ 3,26 + 7,08 + 3,95 + 1,76 + 2,63
1191 1192 1193 1194 1195		12,851 12,847 12,855 12,900 12,900	+9,8615 ,9340 ,8876 ,9335 ,9400	+9,4496 ,6740 ,6265 ,6758 ,7082	-1,1089 ,1088 ,1091 ,1106 ,1106	-9,8850 ,8851 ,8849 ,8838 ,8838	2190 2189 2188 2191 2192	2,66		- 2,80 -22,41 + 0,24 - 0,25
1196 1197 1198 1199 1200	34 2 19,76 40 32 35,48 45 27 33,08 41 58 57,32 46 57 57,41	12,922 12,927 12,931 12,945 12,962	+9,8965 ,9175 ,9289 ,9206 ,9309	+9,5575 ,6227 ,6628 ,6357 ,6748	-1,1113 ,1116 ,1116 ,1121 ,1127	-9,8833 ,8832 ,8831 ,8828 ,8823	2193 2197 2198 2199 2201	$ \begin{array}{r} -3,19 \\ -2,95 \\ -2,53 \\ -2,27 \end{array} $	- 3,12 - 2,97	+ 3,22 - 0,09 + 0,40 - 3,85 + 1,63
1201 1202 1203 1204 1205	32 48 39,83	12,962 12,962 12,971 12,989 12,989	+9,9390 ,9279 ,9430 ,8910 ,9410	+9,7096 ,6629 ,7403 ,5458 ,7266	-1,1127 ,1127 ,1130 ,1136 ,1136	9,8823 ,8823 ,8821 ,8817 ,8817	2203 2200 2206 2204 2207	- 3,97	- 2,14 3,42	- 1,89 + 3,5 <sup>13</sup> + 1,47 + 8,46 - 7,16
1206 1207 1208 1209 1210	41 53 45 34 9,09 42 46 1,46	13,038	+9,9196 ,9196 ,9279 ,9217 ,9191	+9,6366 ,6372 ,6664 ,6454 ,6385	-1,1140 ,1148 ,1145 ,1152 ,1168	9,8814 ,8811 ,8810 ,8805 ,8801	2208 2210 2212 2213 2214	$\begin{array}{c c} -2,01 \\ -2,22 \end{array}$		+ 2,56 + 3,06 + 6,25 + 0,84
1211 1212 1213 1214 1216	56 11 0,49 41 48 40,21 30 20 31,37	13,060 13,078 13,082	+9,9365 ,9400 ,9180 ,8791 ,9360	,6387 ,5183	-1,1156 ,1159 ,1165 ,1167 ,1176	,8800 ,8795 ,8794	2215 2217 2220 2219 2226	+ 0,34 + 0,34 - 3,58	2,75	1 1 7 4

No.	Names.	Mag.	No.	Right Ascen.	Annual		Logari	ithms of	
			Obs.	Jan. 1, 1840.	Precesn.	а	6	c	d
1216 1217 1218 1219 1220	Argus	7 7.8 7.8 7.8 7.8	4 3 8 3	H, M, S, 8 43 38,02 43 50,41 43 55,68 44 43,61 44 47,96	s. + 2,134 2,264 2,152 2,092 2,140	8,7750 ,7477 ,7715 ,7869 ,7769	+ 8,8364 ,8085 ,8323 ,8444 ,8341	-1-0,3292 ,3549 ,3328 ,3206 ,3304	+ 8,6072 ,5425 ,5991 ,6298
221  222  223  224  226	Argus Pixid. Naut. Argus	7.8 8 	3 3 -3 3	45 8,29 45 9,85 45 45 35,92 46 0,74	2,283 2,555 1,705 1,817 2,217	8,7474 ,6941 ,8703 ,8486 ,7638	+8,8033 ,7499 ,9268 ,9030 ,8164	+0,3585 ,4074 ,2317 ,2593 ,3458	+8,5379 ,3521 ,7762 ,7410 ,5754
226   227   228   229   230	Argus	6.7 8.9 7.8 7	3333	46 46 23,13 46 41,65 46 41,66 47 23,25	1,704 2,343 2,163 2,285 1,971	-8,8735 ,7382 ,7771 ,7514 ,8210	+8,9264 ,7893 ,8270 ,8013 ,8686	+0,2315 ,3698 ,3851 ,3589 ,2947	+8,7801 ,5070 ,6040 ,6422
231 232 233 234 235	Argus	6.7 6 7 7 6	33333	47 26,36 47 31,54 47 50,44 47 52,03 48 29,24	2,008 1,534 1,818 2,239 2,008	-8,8132 ,9132 ,8557 ,7643 ,8164	+8,8605 ,9600 ,9013 ,8099 ,8596	+0,3028 ,1858 ,2596 ,3500 ,3028	+ 8,6760 ,8370 ,7490 ,5712 ,6800
236 237 238 238 239 240	Pixid. Naut. Argus	7.8 7 8 7	3 3 3 3 3	48 35,17 48 48,62 49 12,96 49 42,49 50 7,58	2,412 1,598 1,843 2,102 2,339	8,7301 ,9046 ,8644 ,7995 ,7491	+8,7729 ,9466 ,8949 ,8379 ,7861	+0,3824 ,2036 ,2656 ,3226 ,3690	-+ 8,4726 ,8235 ,7456 ,6445 ,6239
241 242 243 244 244	Argus	6.7 9 6.7 7.8 5.6	3 1 3 3 3	50 8,89 50 51,45 50 61,41 50 53,14 51 25,03	1,380 2,164 1,518 1,856 1,868	-8,9524 ,7893 ,9272 ,8569 ,9583	+8,9888 ,8232 ,9614 ,8909 ,9907	+0,1399 ,3363 ,1813 ,2686 ,1361	+8,8889 ,6204 ,8540 ,7473 ,8960
246 247 248 249 260	H Argus Pixid. Naut.	6 8 7 8 8.9 6.7	3 3 3 3 3	51 29,44 51 46,37 51 47,68 52 1,54 52:28,37	1,810 2,135 1,940 1,333 2,546	8,8688 ,7981 ,8412 ,9671 ,7139	+8,9007 ,8289 ,8702 ,9971 ,7417	+0,2576 ,3294 ,2878 ,1248 ,4059	+8,7661 ,6372 ,7195 ,9072 ,3884
251 252 253 254 255	Argus b1	6 6.7 8 7.8 5.6	3 3 3 3 3 3	52 37,68 53 3,60 53 8,47 53 23,33 53 26,98	1,987 1,472 1,473 1,925 2,040	8,8335 ,9435 ,9437 ,8494 ,8240	+8,8611 ,9696 ,9695 ,8742 ,8486	+0,2982 ,1679 ,1682 ,2844 ,3096	+8,7045 ,8749 ,8751 ,7314 ,6856
256 257 358 369 260	Argus	8.9 6.7 7	3 8 3 3	54 1,36 54 18,71 54 30,61 54 33,25 54 45,09	2,004 1,735 2,318 2,180 1,880	-8,8338 ,8936 ,7653 ,7959 ,8636	+8,8561 ,9149 ,7858 ,8161 ,8831	+0,3019 ,2393 ,3661 ,3385 ,2742	+8,7027 ,8018 ,6529 ,6261 ,7535

	Declination	Annual		Logari	thms of		Dlare		lie Brisbane scension	Catalogue.
No.	(South.) Jan. 1. 1840.	Precession	a'	b'	c'	d'	No.	l fr	om	Declin.
1216 1217 1218 1219 1220	42 46 44,05 38 32 58,61 42 13 51,18 44 7 34,76 42 43 1,97	-13,139 13,148 13,148 13,205 13,210	+9,9196 ,9079 ,9180 ,9217 ,9185	+9,6488 ,6117 ,6445 ,6618 ,6506	—1,1186 ,1189 ,1189 ,1207 ,1209	—9,8780 ,8778 ,8778 ,8763 ,8763	2229 2230 2231 2236 2237	+ 1,01 - 1,18 - 4,00 - 0,67 - 0,35	<i>s</i> :	+ 5,80 + 3,08 - 0,41 - 0,46 +11,91
1221 1222 1223 1224 1225	38 2 7,41 27 2 37,02 63 36 · 51 18 0,59 40 23 17,51	13,232 13,236 13,223 13,258 13,288	-+9,9058 ,8021 ,9355 ,9325 ,9112	-1-9,6095 ,4778 ,7253 ,7130 ,6332	—1,1216 ,1217 ,1213 ,1225 ,1235	—9,8757 ,8756 ,8759 ,8750 ,8742	2239 2238 2240 2242 2244	$ \begin{array}{r}     -\frac{2,41}{2,39} \\     -\frac{2,39}{3,95} \end{array} $	- 3,17 - 3,51 	$ \begin{array}{c c} + & 6,74 \\ - & 2,14 \\ \hline + & 3,20 \\ - & 4,69 \end{array} $
1226 1227 1228 1229 1230	53 44 35 56 40,70 42 9 3,84 38 7 21,50 47 46 22,85	13,284 13,314 13,336 13,336 18,376	+9,9350 ,8976 ,9159 ,9042 ,9253	+9,7280 ,5913 ,6500 ,6139 ,6940	—1,1233 ,1243 ,1250 ,1250 ,1263	—9,8743 ,8736 ,8730 ,8730 ,8720	2245 2247 2246 2249 2252	- 2,86 - 3,07 - 2,28 - 3,15	$ \begin{array}{r}     -3,05 \\     -3,44 \\     -3,39 \end{array} $	- 1,62 - 3,00 + 3,89 + 4,05
1231 1232 1233 1234 1236	46 47 29,42 57 1 58,99 51 31 34,35 39 50 38,96 46 54 51,57	13,380 13,388 13,410 13,410 13,449	+9,9243 ,9345 ,9304 ,9079 ,9227	+9,6874 ,7486 ,7193 ,6324 ,6904	1,1264 ,1267 ,1274 ,1274 ,1287	9,8719 ,8716 ,8711 ,8711 ,8700	2253 2256 2259 2258 2262	- 1,30 - 1,88 - 1,28 - 2,98 - 2,75	$ \begin{array}{r} - \overline{2,07} \\ - \overline{2,82} \\ - \overline{3,40} \end{array} $	+ 5,37 + 3,10 + 3,67 - 0,01 + 1,12
1236 1237 1238 1239 1240	33 31 55,74 56 2 46,17 51 5 35,45 44 25 57,17 36 30 39,28	13,458 13,471 16,496 13,531 13,557	+9,8870 ,9325 ,9279 ,9170 ,8960	+9,5695 ,7464 ,7195 ,6744 ,6050	1,1290 ,1294 ,1302 ,1313 ,1321	9,8698 ,8695 ,8688 ,8679 ,8672	2261 2265 2266 2272 2273	- 3,82 - 2,65 - 2,65 - 3,25 - 2,43	- 0,59 - 2,25 	+ 2,93 + 1,38 + 3,48 + 2,18 - 2,14
1241 1242 1243 1244 1244	59 44 48,20 42 38 30,52 57 37 45,69 50 58 36,45 60 2 8,61	13,565 13,608 13,604 13,604 13,634	+9,93 <b>20</b> ,9117 ,9309 ,9263 ,9304	+9,7670 ,6629 ,7585 ,7222 ,7704	-1,1324 ,1338 ,1337 ,1337 ,1346	0,8669 ,8658 ,8659 ,8659 ,8651	2274 2277 2279 2278 2281	- 2,63 + 1,40 - 4,10 - 3,16 - 3,00	$ \begin{array}{r} -2,52 \\ -1,69 \\ -2,20 \end{array} $	- 4,23 + 3,01 + 2,86 - 5,02 + 0,89
1246 1247 1248 1249 1250	52 6 39,59 43 38 58,72 49 3 57,18 60 35 36,66 28 11 14,20	13,642 13,659 13,659 13,672 13,710	4-9,9263 ,9133 ,9227 ,9294 ,8615	+9,7303 ,6726 ,7118 ,7741 ,5096	-1,1349 ,1354 ,1354 ,1358 ,1370	,8648 ,8644 ,8644 ,8640 ,8629	2280 2282 2285 2288 2289	- 1,67 - 3,63 - 1,90 - 3,26 - 1,08	- 2,35 - 3,72	- 0,86 + 4,44 + 1,94 -10,89 + 4,27
1251 1252 1253 1264 1255	47 67 19,26 68 36 46,13 58 36 33,08 49 37 67,64 46 37 1,21	13,715 13,740 13,745 13,761 13,766	+9,9206 ,9284 ,9284 ,9217 ,9170	+9,7060 ,7674 ,7676 ,7187 ,6984	-1,1372 ,1380 ,1381 ,1387 ,1388	-9,8628 ,8621 ,8620 ,8615 ,8614	2291 2293 2294 2295 2296	- 2,42 - 2,31 - 0,99 - 4,25 - 2,42	- 3,24 - 3,91 - 3,26 - 2,38	+ 4,62 + 7,72 + 0,03 - 2,92 + 3,28
1256 1257 1258 1259 1260	54 0 50,46 37 47 44,58 42 33 0,98	13,821 13,833 13,838	+9,9180 ,9248 ,8960 ,9079 ,9212	+9,7070 ,7467 ,6266 ,6694 ,7294	-1,1400 ,1405 ,1409 ,1411 ,1415	,8595 ,8594	2299 2303 2304 2305 2306	<del>- 2,33</del>	- 3,00 - 3,20	

No.	Names.	Mar	No.	Right Ascen.	Annual		Logari	thms of	
110.	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	b	c	d
1261 1262 1263 1264 1265	4rgus	7 6.7 6.7 7.8 8	3 4 3 3 3	11. M. s. 8 54 47,21 55 26,07 55 28,59 55 37,18 55 46,29	s. - <b>+1,</b> 959 2,223 1,496 1,882 1,929	8,8461 ,7887 ,9467 ,8658 ,8567	-1-8,8655 ,8057 ,9636 ,8820 ,8716	+0,2920 ,3469 ,1749 ,2746 ,2853	+8,7235 ,6080 ,8774 ,7560 ,7389
1266 1267 1268 1269 1270	Argus Pixid Naut, Argus	7.8 7.8 7.8 7	36346	55 58,87 56 8,65 56 16,80 56 16,47 56 42,40	2,296 2,62 <b>2</b> 1,969 1,965 2,203	8,7741 ,7036 ,8486 ,8492 ,7969	+8,7890 ,7227 ,8621 ,8629 ,8090	+0,3610 ,4186 ,2942 ,2934 ,3480	+8,5711 ,3329 ,7255 ,7268 ,6232
1271 1272 1273 1274 1275	Argus	6.7 6.7 7 6 7	3 3 3 3 3	56 47,23 57 5,12 57 55,24 58 38,82 59 16,87	1,861 1,389 1,968 2,067 2,080	-8,8740 ,9738 ,8533 ,8330 ,8319	+8,8859 ,9842 ,8609 ,8378 ,8344	+0,2697 ,1427 ,2940 ,3153 ,3181	-1-8,7681 ,9129 ,7317 ,6935 ,6903
1276 1277 1278 1279 1280	Argus	7.8 8 8  8.9	3 3 3	59 \$1,22 59 44,79 9 0 3,88 0 0 17,75	1,862 1,310 1,683 1,381 1,963	8,8822 ,9976 ,9229 ,9838 ,8619	+8,8837 ,9984 ,9224 ,9846 ,8601	+0,2700 ,1173 ,2261 ,1402 ,2929	+8,7780 ,9425 ,8400 ,9245 ,7432
1281 1282 1283 1284 1285	Argus Pixid, Naut.	8,9 7 7.8 8 8	33333	0 28,45 0 32,10 1 6,19 1 44,26 1 46,01	1,958 1,604 2,049 1,873 2,608	8,8633 ,9412 ,8443 ,8866 ,7239	-+8,8613 ,9389 ,8398 ,8795 ,7166	+0,2918 ,2052 ,3115 ,2725 ,4163	+8,7455 ,8659 ,7106 ,7825 ,3681
1286 1287 1288 1289 1290	Argus	7 7 8 7.8 6.7	3 3 3 5	1 47,73 1 56,01 2 17,34 2 55,68 2 56,87	2,369 2,163 1,537 1,477 1,642	—8,7732 ,8203 ,9607 ,9753 ,9410	+8,7658 ,8128 ,9519 ,9639 ,9296	-+0,3746 ,3351 ,1867 ,1694 ,2238	+8,5499 ,6622 ,8919 ,9112 ,8637
1291 1292 1293 1294 1295	Argus	7 7·8 8 7.8	3 3 3 3 3 3	3 6,04 3 17,93 3 33,70 3 14,59 4 22,62	1,928 1,548 1,548 1,804 2,010	-8,8768 ,9617 ,9626 ,9075 ,8630	+8,8643 ,9491 ,9490 ,8933 ,8461	+0,2851 ,1898 ,1898 ,2562 ,3032	+8,7647 ,8926 ,8936 ,8148 ,7395
1296 1297 1298 1299 1300	Argus	6.7 -7.8 8 6	သ ၂ က က က	4 42,95 4 5 1,90 5 12,00 5 27,56	2,016 1,901 2,218 2,218 2,331	8,8625 ,8496 ,8162 ,8166 ,7910	+8,8443 ,8707 ,7967 ,7966 ,7698	+0,3045 ,2790 ,3460 ,3460 ,3675	+8,7380 ,7840 ,6470 ,6475 ,5864
1301 1302 1303 13 <b>04</b> 1305	Argus Pixid, Naut. Argus Pixid, Naut. Argus	6.7 7 7 6.7	4 3 3	5 54,03 6 8,03 6 10,99 6 30,85	2,117 1,698 1,554 2,628 2,144	8,8423 ,9387 ,9686 ,7494 ,8377	+8,8196 ,9157 ,9448 ,7254 ,8127	+0,32 <i>5</i> 7 ,2299 ,1914 ,4028 ,3312	+8,6989 ,8581 ,9000 ,4541 ,6888

, I		Declination.	A1		Logarit	hms of		Diffe	rence from th		Catalogue.
N	To.	(South.) Jan. 1. 1840.	Annual Precession	a'	6'	c'	d'	No.	from M. C.		Declin.
19 19 19	261 262 263 264 265	48 56 5,00 41 14 18,90 58 28 20,67 50 55 50,74 49 48 42,68	-13,850 13,892 13,892 13,905 13,909	+9,9191 ,9036 ,9248 ,9201 ,9191	+9,7170 ,6601 ,7716 ,7314 ,7246	-1,1415 ,1428 ,1428 ,1432 ,1433	—9,8590 ,8578 ,8578 ,8574 ,8573	2307 2309 2311 2312 2313		- 3,24 - 2,47	+ 1,57 + 2,51 + 8,60 + 1,82 - 1,00
19	266 267 268 269 270	38 46 31,88 24 52 32,29 48 57 4,00 48 57 5,85 42 4 38,25	13,926 13,938 13,947 13,947 13,972	+9,8965 ,8432 ,9170 ,0175 ,9047	+9,6389 ,4666 ,7196 ,7201 ,6697	1,1438 ,1442 ,1445 ,1445 ,1453	—9,8568 ,8564 ,8562 ,8562 ,8562	2314 2315 2316 2317 2319	- 4,14 - 2,04 - 1,86 - 0,62 - 2,10	- 1,41 - 3,64 	+ 3,78 5,61 4,64,12 1,06 0,79
1 1 1	271 272 273 274 275	51 33 39,50 60 20 15,90 49 3 54,62 46 27 46,02 46 10 51,56	13,976 14,001 14,047 14,093 14,130	+9,9201 ,9227 ,9154 ,9112 ,9096	+9,7375 ,7833 ,7240 ,7075 ,7086	1,1454 ,1462 ,1476 ,1490 ,1501	—9,8553 ,8546 ,8532 ,8519 ,8507	2320 2322 2323 2326 2328	- 3,82 - 3,26 - 2,19 - 3,12 - 4,56	$ \begin{array}{c c} - & 3,14 \\ - & 2,73 \\ \hline - & 1,71 \end{array} $	+ 1,08 - 0,40 + 4,02 + 5,09 + 9,39
111	276 277 27⊬ 27⊎ 280	51 52 15,00 61 43 9,65 55 42 19,50 60 43 49 33 56,90	14,147 14,159 14,179 14,159 14,196	+9,9164 ,9185 ,9180 ,9185 ,9133	+9,7446 ,7940 ,7669 ,7898 ,7315	1,1506 ,1510 ,1517 ,1510 ,1622	—9,8502 ,8499 ,8492 ,8499 ,8487	2329 2332 2333 2331 2335	- 2,76 - 1,87 - 2,67 - 1,64		$ \begin{array}{c c} - 4,08 \\ + 3,09 \\ - 0,73 \\ \hline - 2,59 \end{array} $
	281 282 283 284 285	49 30 22,86 57 12 58,32 47 16 45,14 51 53 19,60 26 7 24,91	14,204 14,208 14,245 14,246 14,290	+9,9163 ,9180 ,9090 ,9138 ,8439	+9,7326 ,7753 ,7180 ,7489 ,4973	—1,1624 ,1525 ,1537 ,1549 ,1560	—9,8485 ,8483 ,8472 ,8459 ,8458	2336 2337 2340 2344 2342	- 2,91 - 2,81 - 2,41 + 0,64 - 2,40		- 3,10 - 3,31 + 0,34 + 0,05 + 0,79
	1286 1387 1288 1289 1290	59 37 6,26	14,294 14,315 14,356	4-9,8848 ,9025 ,9154 ,9143 ,9143	+9,6299 ,6951 ,7850 ,7910 ,7779	-1,1550 ,1552 ,1558 ,1570 ,1570	-9,8458 ,8457 ,8450 ,8437 ,8437	2349 2354	-2,65 -1,56	- 3,19 - 3,60 	- 1,54 + 3,31 + 5,67 - 3,61 + 3,06
	1291 1292 1293 1294 129 <i>5</i>	58 30 16,87 58 32 21,07 53 38 47,75	14,376 14,392 14,410	-1-9,9117 ,9143 ,9138 ,9117 ,9069	+9,7435 ,7865 ,7872 ,7632 ,7342	1,1676 ,1576 ,1581 ,1586 ,1697	9,8432 ,8431 ,8425 ,8418 ,8408	$egin{array}{c} 2359 \\ 2361 \\ 2363 \\ \hline \end{array}$	3,11	+36,18 - 2,44	$ \begin{array}{r} -2,13 \\ -5,04 \\ +0,42 \\ -3,95 \end{array} $
	1296 1297 1298 1299 1300	51 36 31 42 36 48,30 31 42 37 3,54	14,477 14,485 1 <b>1</b> 4,493	'J ,8960	,6902	,1609 ,1612	,839 <i>t</i> ,8393	3 237 5 237 237	$\begin{vmatrix} 1 & -2 \\ 2 & -2 \\ 3 & -3 \\ 49 \end{vmatrix}$	$-\frac{2,69}{-2,86}$	+10,20 + 3,65 +57,82 + 2,30
	1303 1303 1303 1304 1308	56 7 58 37 15,0 4 30 24 39,3	14,541 2 14,554 5 14,657	,9117 ,8585	,7800 ,7925 ,5658	,1626 ,1630 ,1631, ,163	,837 ,837 1 ,837	$egin{array}{c c} 7 & 238 \ 3 & 237 \ 1 & 238 \ \end{array}$	$\begin{vmatrix} 3 & \\ 7 & -63,0 \\ 2 &3,0 \end{vmatrix}$		

No.	Names.	Mag.	No.	Right Ascen.	Annual		Logari	thms of	
	2140108		Орв.	Jan. 1, 1840.	Precesn.	а	b	c	d
1306 1307 1308 1309 1310	Argus	6.7 6.7 6 5.6 7	3 3 3 3	9 6 36,61 7 10,16 7 16,99 7 88,63 7 58,11	8. +2,2]4 1,642 2,256 1,374 2,101	8,8215 8,9545 8,8134 9,0114 8,8519	+8,7960 ,9270 ,7853 ,9823 ,8213	+0,3462 ,2154 ,3533 ,1380 ,3224	+8,6552 ,8798 ,6358 ,9560 ,7139
1311 1312 1313 1314 1315	Argus	7.8 6.7 7 6	3 3 3 3	8 10,02 8 15,15 8 18,18 8 44,17 8 47,09	1,866 2,205 2,424 1,570 2,227	-8,9077 ,8281 ,7772 ,9749 ,8244	+8,8763 ,7964 ,7451 ,9415 ,7905	+ 0,2709 ,3435 ,3845 ,1959 ,3477	+8,8093 ,6659 ,5392 ,9070 ,6568
1316 1317 1318 1319 1320	Pixid. Naut. Argus	6.7 7.8 7 6 6.7	3 4 3 3	8 56,04 9 14,39 9 27,67 9 33,77 10 28,75	2,487 2,582 2,166 1,779 2,210	8,7648 ,7457 ,8406 ,9315 ,8 <b>3</b> 29	+8,7303 ,7098 ,8044 ,8951 ,7926	+0,3957 ,4120 ,3357 ,2502 ,3444	+8,4972 ,4208 ,6895 ,8445 ,6716
1321 1822 1323 1324 1325	Argus	6.7 6.7 7 7	១១១១ <u>១</u>	10 41,11 10 54,78 11 4,33 11 6,86 11 13,02	2,346 1,643 1,689 2,190 2,039	-8,8009 ,9660 ,9666 ,8394 ,8763	+8,7599 ,9243 ,9143 ,7969 ,8333	+0,3703 ,2156 ,2276 ,3404 ,3094	+8,5974 ,8933 ,8798 ,6840 ,7537
1326 1327 1328 1329 1330	g Argus  K  Pixid. Naut.	5.6 7 6.7 3.4 7.8	333333	11 41,15 12 11,25 12 46,61 12 48,58 13 10,63	1,695 2,176 1,992 1,608 2,481	-8,9573 ,8458 ,8920 ,9800 ,7769	+8,9127 ,7992 ,8432 ,9312 ,7251	+0,2292 ,3376 ,2993 ,2063 ,3946	+8,8803 ,6952 ,7788 ,9114 ,5171
1331 1332 1333 1334 1336	Argus	8 6.7 7.8 7	313333	13 26,30 14 4,37 14 17,47 14 21,98 14 40,00	2,106 2,403 2,143 2,200 1,830	-8,8664 ,7960 ,8696 ,8460 ,9360	+8,8150 ,7420 ,8049 ,7910 ,8800	+0,3235 ,3807 ,3310 ,3424 ,2624	+8,7327 ,6748 ,7187 ,6918 ,8469
1336 1337 1338 1339 1340	Argus	8 6.7 8.9 6.7 7.8	3 3 3 3	15 14,14 15 42,60 16 32,64 16 33,94 16 37,76	1,830 2,291 1,831 2,182 1,471	-8,9377 8,8271 8,9414 8,8562 9,0219	+8,8794 ,7671 ,8782 ,7928 ,9583	+0,2624 ,3600 ,2627 ,3388 ,1676	+8,8489 ,6487 ,8534 ,7086 ,9651
1341 1342 1343 1344 1344 1345	Argus	6.7 6 7 8 6.7	33333	16 58,66 17 6,37 17 19,75 17 26,74 17 46,09	1,829 1,447 2,410 1,550 2,116	-8,9434 9,0285 8,8023 9,0076 8,8760	+8,8785 ,9631 ,7358 ,9409 ,8080	+0,2622 ,1605 ,3820 ,1903 ,3255	-+8,8561 ,9734 ,5828 ,9460 ,7445
1346 1347 1348 1349 1350	Pixid. Naut.	6.7 7.8 8 8	3   3   3   3	17 53,12 17 56,08 18 18 22,01 18 22,04	2,162 2,371 1,952 2,255 2,602	8,8652 ,8131 ,9173 ,8452 ,7614	+8,7966 ,7444 ,8483 ,7727 ,6903	+0,3349 ,3749 ,2905 ,3631 ,3932	+8,7239 ,6098 ,8147 ,6788 ,4375

<u> </u>	Declination	Annual	<u> </u>	Logari	thms of		Diffe		he Brisbane scension	Catalogue.
No.	(South.) Jan. 1. 1840.	Precession	a'	b'	<u>ε΄</u>	d'	No.		om	Declin.
1306 1307 1308 1309 1310	42 57 25,21 57 18 49,02 41 37 4,00 61 39 39,21 46 40 44,98	-14,582 14,613 14,621 14,637 14,661	+9,8949 ,9085 ,8910 ,9069 ,8998	+9,695 <i>5</i> ,7880 ,6855 ,8082 ,7262	1,1638 ,1647 ,1650 ,1665 ,1662	—9,8363 ,8353 ,8350 ,8345 ,8336	2387 2391 2390 2394 2395	s. — 2,43 — 2,39 — 1,56 — 2,79 — 1,82		+ 4,96 - 0,45 - 0,40 + 5,13 + 2,47
1311 1312 1313 1314 1315	52 50 44,42 43 29 7,10 35 18 7,78 58 45 15,52 42 48 16,23	14,673 14,677 14,685 14,705 14,713	+9,9058 ,8938 ,8733 ,9063 ,8915	+9,7662 ,7025 ,6269 ,7976 ,6982	1,1065 ,1666 ,1669 ,1675 ,1677	-9,8332 ,8331 ,8328 ,8321 ,8319	2398 2397 2399 2404 2403	— 2,06 — 3,₹4 — 1,63 — 2,00 — 2,04	——————————————————————————————————————	- 1,16 - 1,23 - 1,59 + 7,33 + 1,72
1316 1317 1318 1319 1320	32 39 32,52 28 13 18,28 44 53 35,61 54 54 34,96 43 35 56,45	14,724 14,745 14,748 14,752 14,811	+9,8639 ,8463 ,8949 ,9047 ,8915	+9,5984 ,5418 ,7157 ,7799 ,7074	-1,1680 ,1686 ,1687 ,1688 ,1706	—9,8315 ,8308 ,8306 ,8305 ,8284	2405 2406 2409 2410 2416			+ 3,07 +11,06 - 1,47 - 0,49 + 6,33
1321 1322 1323 1324 1325	38 43 55,75 57 43 21,62 56 54 42,19 44 20 39,65 48 54 38,82	14,823 14,835 14,843 14,846 14,854	+9,8804 ,9031 ,9031 ,8921 ,8982	+9,6655 ,7966 ,7928 ,7143 ,7473	1,1709 ,1713 ,1716 ,1716 ,1718	-9,8280 ,8276 ,8273 ,8272 ,8269	2417 2418 2420 2419 2421	- 1,90 - 2,46 - 2,33 - 3,85 - 1,85		+ 2,77 + 1,80 + 0,56 + 2,74 + 2,12
1326 1327 1328 1329 1330	56 52 23,75 44 58 2,25 50 22 52,42 58 36 17,51 33 25 42,37	14,878 14,909 14,944 14,944 14,971	+9,9020 ,8921 ,8976 ,9004 ,8621	+9,7937 ,7211 ,7593 ,8039 ,6146	-1,1725 ,1734 ,1745 ,1745 ,1752	-0,8261 ,8249 ,8237 ,8237 ,8227	2424 2426 2428 2429 2430	- 1,87 - 3,98 - 2,52 - 2,50 - 2,90	- 3,02 - 2,50 - 4,09	+ 0,22 -11,20 - 0,89 + 6,44 + 2,42
1331 1332 1333 1334 1335	47 18 12,39 36 54 13,48 46 16 31,08 44 29 50,64 54 30 42,63	14,983 15,022 15,033 15,037 15,052	+9,8932 ,8722 ,8910 ,8876 ,8970	+9,7400 ,6636 ,7342 ,7210 ,7806	1,1756 ,1767 ,1770 ,1772 ,1776	-9,8223 ,8208 ,8204 ,8203 ,8197	2431 2434 2435 2437 2440	- 1,36   - 2,11   - 2,79   - 4,41   - 2,84		+ 2,30 + 0,11 - 1,85 + 3,22 - 3,46
1336 1337 1338 1339 1340	58 30 45,54 54 43 19,71 45 22 3,11	15,087 15,114 15,163 15,160 15,167	+9,8965 ,8808 ,8943 ,8865 ,8926	+9,7879 ,6990 ,7908 ,7312 ,8222	-1,1786 ,1794 ,1807 ,1808 ,1809	9,8184 ,8174 ,8166 ,8155 ,8153	2448 2446 2466 2464 2454	- 2,98 - 3,34 - 3,73 - 2,30 - 1,68	<u>- 2,19</u>	+ 0,52 + 3,29 - 0,65 + 2,47 + 6,27
1341 1342 1343 1344 1344	54 50 15,16 61 43 25,53 37 4 24,96 60 8 59,27 47 36 7,77	15,186 15,195 15,209 15,213 15,232	+9,8938 ,8915 ,8686 ,8926 ,8882	+9,7922 ,8247 ,6606 ,8186 ,7493	-1,1814 ,1817 ,1821 ,1822 ,1827	-9,8146 ,8143 ,8137 ,8136 ,8128	2457 2461 2460 2463 2464	- 2,79 - 1,67 - 2,37 - 2,60 - 2,93	$-\frac{3,71}{2,66}$	- 0,01 + 3,49 - 0,58 - 6,55 + 5,54
1340 1347 1348 1349 1350	43 11 47,51	15,240 15,243 15,247 15,269 15,277	+9,8859 ,8716 ,8910 ,8808 ,8382	+9,7398 ,6778 ,7787 ,7174 ,5582	-1,1830 ,1831 ,1832 ,1838 ,1840	-9,8125 ,8124 ,8122 ,8114 ,8111	2466 2465 2468 2472 2473	- 2,49 - 2,49 0,93 + 8,47	2,40	$\begin{array}{c} + 4,68 \\ + 1,23 \\ + 6,41 \\ + 12,85 \end{array}$

37		100	No.	Right Ascen.	Annual		Logari	thms of	ggadalengilijani — Pangladanajangag
No.	Names.	Mag.	No. Obs.	Jan. 1, 1840.	Precesn,	a	b	c	d
1351 1352 1353 1354 1364 1365	Argus Pixid. Naut.	6.7 7 7 6.7 7.8	3 3 5 5 3	11. M. S. 9 18 38,68 19 6,63 19 16,97 19 46,94 19 53,86	8 + 1,998 2,255 2,583 2,609 2,605	-8,9079 8,8451 8,7670 8,7626 8,7858	+8,8366 ,7717 ,6929 ,6867 ,7094	+0,3006 ,3531 ,4121 ,4165 ,3988	+8,7988 ,6815 ,4576 ,4369 ,5246
1356 1357 1358 1359 1360	Argus	7 6.7 7 7	3 3 3 3 3	20 2,36 20 2,55 20 14,52 20 15,61 20 24,57	1,525 1,521 2,507 1,897 2,117	—9,0213 9,0226 8,8349 8,9374 8,87 <i>5</i> 9	+8,9449 ,9459 ,7572 ,8599 ,7977	+0,1833 ,1821 ,3630 ,2781 ,3318	-J-8,9627 ,9643 ,6569 ,8442 ,7406
1361 1362 1363 1364 1366	Argus Antl. Pneum. Argus	7.8 7.8 7 7.8 6	3 3 3 3	20 39,19 20 49,09 21 0,52 21 2,21 21 6,10	2,254 1,926 2,485 2,032 1,947	8,8493 8,9381 8,7931 8,9064 8,9278	+8,7701 ,8522 ,7125 ,8259 ,8469	+0,3529 ,2846 ,3953 ,3079 ,2894	+8,6877 ,8351 ,6444 ,7939 ,8285
1366 1367 1368 1369 1370	Argus	7.8 7 7 7	5 3 3 -	21 19,67 21 28,14 21 47,56 21 22 21,31	2,121 1,513 1,911 1,970 1,662	8,8851 9,0289 8,9386 8,9253 8,9988	+8,8033 ,9468 ,8552 ,8404 ,9134	-1-0,3265 ,1798 ,2813 ,2945 ,2206	-1-8,7663 ,9719 ,8448 ,8236 ,9314
1371 1372 1373 1374 1375	Argus	8 7.8 7	3 3 3 3 3 3	22 37,09 22 42,70 22 44,92 22 23 46,12	2,227 2,227 1,951 2,129 2,276	8,8616 8,8618 8,9316 8,8878 8,8522	+8,7749 -,7748 ,8446 ,7996 ,7608	+0,3477 ,3477 ,2903 ,3302 ,3572	+8,7097 ,7100 ,8331 ,7591 ,6883
1376 1377 1378 1379 1380	Argus  Pixid. Naut.	8 7 6.7 6.7 6.7	4 3 3 6 3	23 51,54 24 35,06 24 38,01 24 45,79 25 18,65	2,153 2,234 2,040 1,520 2,625	8,8892 8,8653 8,9152 9,0384 8,7706	+8,7975 ,7708 ,8206 ,9436 .,6731	+0,3290 ,3491 ,3096 ,1818 ,4191	4-8,7605 ,7140 ,8046 ,9827 ,4416
1381 1382 1383 1384 1385	Argus	6.7 7.8 7 8	7 3 3 -	25 32,18 25 32,29 25 34,32 25 26 15,02	1,521 2,166 2,411 1,529 2,162	-9,0408 8,8853 8,8219 9,0400 8,8884	+8,9429 ,7872 ,7237 ,9411 ,7877	+0,1821 ,3357 ,3822 ,1844 ,3349	+8,9854 ,7510 ,6137 ,9843 ,7562
1387 1388 1389 1390	Argus	5 7 7.8	3 3 4	26 21,63 26 27 0,92 27 32,32 27 53,96	1,822 1,531 1,829 1,928 1,828	-8,9746 9,0425 8,9750 8,9523 8,9778	+8,8733 ,9402 ,8712 ,8464 ,8706	+0,2605 ,1860 ,2622 ,2620 ,2620	-+ 8,4949 ,987 L ,8961 ,8611 ,8986
1391 1392 1393 1394 1395		7.8 7	3 3 3 3	27 27 59,56 28 7,85 28 13,07 28 36,34	1,835 2,120 1,656 2,521 2,072	8,9764 8,9042 9,0195 8,8008 8,9186	+8,8689 ,7967 ,9112 ,6921 ,8086	+0,2636 ,3263 ,2191 ,4033 ,3164	+8,8905 ,7824 ,9562 ,5448 ,8064

<u> </u>	Declination.	Annual	1	Logari	thms of	<u></u>	Diffe		he Brisbane scension	Catalogue,
No.	(South.) Jan. 1. 1840.	Precession	a'	<i>b'</i>	c'	d'	No.		om T.	Declin.
1351 1352 1363 1364 1365	51 3 5,12 43 17 22,78 29 20 41,57 28 5 45,41 33 12 15,46		+9,8899 ,8797 ,8414 ,8363 ,8543	+9,7731 ,7194 ,5739 ,5574 ,6232	1,1841 ,1850 ,1853 ,1861 ,1863	9,8109 ,8097 ,8093 ,8082 ,8079	2474 2475 2478 2479 2480	$ \begin{array}{r} s. \\ -2,41 \\ -1,58 \\ -2,38 \\ -2,50 \\ -1,86 \end{array} $		+ 1,46 + 2,37 + 2,37 + 1,94 + 1,52
1356 1357 1358 1359 1360	60 57 30,28 60 57 30,83 41 33 35,12 53 46 24,26 47 4 4,02	15,357 15,360 15,375 15,371 15,382	+9,8876 ,8876 ,8766 ,8887 ,8881	+9,8258 ,8262 ,7069 ,7916 ,7498	1,1863 ,1864 ,1868 ,1867 ,1870	—9,8079 ,8078 ,8072 ,8073 ,8069	2484 2485 2486 2487 2488	$\begin{array}{r} -2,08 \\ -1,19 \\ \hline -3,21 \\ -1,98 \end{array}$		$ \begin{array}{r} -4 & 69,91 \\ -1,88 \\ +0,39 \\ -0,39 \\ +4,13 \end{array} $
1361 1362 1363 1364 1366	43 32 50,28 53 8 53,85 34 18 47,46 50 29 0,76 52 41 10,97	15,397 15,401 15,417 15,417 15,420	+9,8779 ,8876 ,8541 ,8859 ,8876	+9,7239 ,7889 ,6373 ,7735 ,7869	-1,1874 ,1875 ,1880 ,1880 ,1881	—9,8062 ,8061 ,8055 ,8055 ,8053	2490 2492 2193 2494 2495	+ 0,49 - 2,92 - 2,86 - 4,12 - 3,09	$ \begin{array}{r} -2,71 \\ -4,11 \\ -0,26 \\ -3,20 \end{array} $	+ 6,21 + 3,79 - 0,66 - 4,13 + 4,29
1366 1367 1368 1369 1370	49 0 0,20 61 15 40,99 53 39 28,02 52 16 68 33 3,94	15,435 15,438 15,457 15,479 15,487	+9,8831 ,8348 ,8865 ,8848 ,8848	+9,7578 ,8297 ,7934 ,7861 ,8206	—1,1385 ,1886 ,1891 ,1897 ,1899	—9,8047 ,8046 ,8038 ,8029 ,8026	2496 2498 2499 2502 2503	$ \begin{array}{r} -2,18 \\ -1,60 \\ -2,70 \\ -2,28 \end{array} $		+ 7,34 + 2,78 - 1,07 + 3,80
1371 1372 1373 1374 1375	44 48 7,70 44 48 16,95 52 49 12,92 48 0 43 15 32,38	15,505 15,508 15,508 15,527 15,571	+9,8774 ,8774 ,8848 ,8808 ,8739	+9,7366 ,7369 ,7901 ,7605 ,7265	-1,1905 ,1906 ,1906 ,1912 ,1923	—9,8018 ,8017 ,8017 ,8009 ,7990	2505 2507 2509 2510 2514	$ \begin{array}{c c} -2,50 \\ -2,15 \\ -2,70 \\ \hline -0,88 \end{array} $		- 5,89 - 3,77 - 1,04 + 0,50
1376 1377 1378 1379 1380	48 0 49,73 44 52 17,82 50 49 0,91 61 34 29,35 27 55 29,20	15,575 15,615 15,616 15,619 15,659	+9,8797 ,8745 ,8808 ,8791 ,8299	+9,7618 ,7403 ,7811 ,8360 ,5638	-1,1924 ,1936 ,1935 ,1936 ,1948	-9,7989 ,7971 ,7971 ,7970 ,7963	2516 2520 2523 2524 2525	- 2,06 - 1,97 - 2,06 - 2,32		+ 7,91 + 0,32 + 2,50 + 1,73 + 4,91
1381 1382 1383 1384 1385	47 14 58,70 38 14 1,18 61 34	15,662 15,666 15,666 15,676 15,713	+9,8779 ,8762 ,8615 ,8774 ,8756	+9,8376 ,7590 ,6848 ,8376 ,7618	-1,1949 ,1950 ,1950 ,1953 ,1960	-9,7951 ,7949 ,7949 ,7945 ,7933	2530 2527 2526 2533 2534			$ \begin{array}{r} + 2,46 \\ + 0,82 \\ - 2,47 \\ + 6,82 \end{array} $
1386 1387 1388 1389 1390	61 39 56 16 58,57 54 7 24,71	15,710 15,718 15,746 15,775 15,793	+9,8791 ,8762 ,8785 ,8774 ,8768	+9,8146 ,8393 ,8153 ,8048 ,8173	—1,1962 ,1964 ,1972 ,1980 ,1984	-9,7930 ,7924 ,7914 ,7901 ,7893	2536 2538 2539 2542 2543	$\begin{bmatrix} -1,62 \\ -1,38 \end{bmatrix}$		$\begin{array}{r} + 2,29 \\ + 8,00 \\ - 3,22 \\ + 2,46 \end{array}$
1391 1392 1393 1394 1396	48 2 47,61 59 48 58,51 33 39 19,98	15,796 15,793 15,807 15,814 15,832	,8745 ,8463	,6411	,1930	,788 <b>7</b> ,7881	2548 2549 2550 2549 2550	$\begin{array}{c c} & -4,35 \\ & +0,24 \\ & +2,22 \end{array}$		$ \begin{array}{r}  + 4.49 \\  - 2.98 \\  + 1.05 \\  + 1.61 \end{array} $

No.	Namos.	Mag.	No.	Right Ascen.	Annual		Logarit	hms of	
180	Names.	1,111,12	Obs.		Precesn.	· a	6	· c	d
1396 1397 1398 1399 1400	Argus Pixid. Naut. Argus	7.8 8.9 7.8 8.9	3 5 3 6	9 28 9 28 57,97 29 15,48 29 19,35 29 31,72	** 2,163 2,655 2,655 2,165 1,658 2,147	8,8980 8,7716 8,8986 9,0227 8,9008	+8,7872 ,6600 ,7862 ,9100	+0,3330 ,4241 ,3334 ,2196 ,8318	+8,7704 ,4261 ,7710 ,9599 ,7749
1401 1402 1403 1404 1406	Argus Antl. Paeum. Argus	7.8 5.6 7.8 7	3 3 3 3 3	29 33,77 29 48,26 30 15,90 30 29,61 30 38,07	2,294 1,738 2,609 2,617 2,167	8,8624 9,0056 8,7844 8,7829 8,8995	+8,7484 ,8908 ,6676 ,6653 ,7816	+0,3606 ,2400 ,4165 ,4178 ,3359	+8,7002 ,9365 ,4770 ,4699 ,7710
1406 1407 1408 1409 1410	Argus Antl, Pneum. Argus	7 5.6 7.8 7	3 3 3 3 3	30 45,55 30 49,20 31 6,31 31 51,95 32 13,00	2,076 2,493 2,150 2,002 2,420	-8,9241 8,8136 8,9064 8,9466 8,8357	+8,8055 ,6946 ,7854 ,8236 ,7115	+0,3172 ,3967 ,3324 ,3016 ,3838	+8,8135 ,5765 ,7809 ,8486 ,6338
1411 1412 1413 1414 1415	Argus Antl. Pneum. Argus	8 7.8 7 7 7.8	8 8 8 8 8 8 8	32 18,17 32 21,70 33 19,74 33 48,39 33 55,68	2,175 1,404 2,604 2,200 2,042	-8,9020 9,089 <del>2</del> 8,7918 8,8996 8,9423	+8,7775 ,9645 ,6631 ,7691 ,8112	+0,3375 ,1474 ,4138 ,3424 ,3101	+8,7737 9,0439 8,4936 8,7674 8,8403
1416 1417 1418 1419 1420	Argus Antl, Pneum. Argus	7 7.8 7 6.7 5.6	3 3 3 3	34 9,97 54 13,86 84 34,23 34 52,70 34 55,14	1,974 1,819 2,560 2,619 1,664	8,9608 9,0003 8,8060 8,7912 9,0399	+8,8289 ,8682 ,6714 ,6564 ,9052	+0,2953 ,2598 ,4082 ,4181 ,2211	+8,8690 ,9268 ,5376 ,4849 ,9802
1491 1422 1423 1424 1425	Argus Antl. Pneum. Argus	7 8 7 6 7	3 3 3 -	34 55,78 35 40.06 35 47,21 35 57,00 36	1,464 1,975 1,845 2,523 2,112	-9,0863 8,9654 8,9989 8,8175 8,9305	+8,9505 ,8272 ,8607 ,6785 ,7899	+0,1655 ,2956 ,2660 ,4019 ,3247	+9,0381 8,8749 8,9239 8,5740 8,8190
1426 1427 1428 1429 1430	Argus	8 7 7.8 7	3 3 3 3	36 29,82 36 32,32 37 30,75 37 46,57	2,280 2,009 1,971 1,952 2,126	8,8848 ,9586 ,9690 ,9769 ,9311	+8,7434 ,8175 ,8276 ,8318 ,7849	+0,3579 ,3030 ,2947 ,2905 ,3276	+8,7358 ,8640 ,8798 ,8910 ,8186
1431 1432 1433 1434 1435	Argus Antl. Pneum. Argus Antl., Pneum.	7.8 6.7 7.8 7.8 7	3 3 3 3	37 48,61 38 16,89 38 20,58 38 41,96 39 11,94	2.024 2,034 2,630 2,216 2,683	—8,9588 ,9575 ,7956 ,9088 ,7849	+8,8123 ,8092 ,6467 ,7588 ,6326	+0,3062 ,3083 ,4200 ,3456 ,4286	+8,8632 ,8609 ,4879 ,7787 ,4355
1436 1437 1438 1439 1440	Argus	7.8 7.8 7 7.8 7.8	3 3 3 3 3	39 30,85 39 38,30 39 49,49 39 52,06 40 0,63	2,294 2,353 1,894 2,031 2,298	—8,8888 ,8726 ,9993 ,9632 ,8895	+8,7356 ,7187 ,8448 ,8084 ,7342	+0,3606 ,3716 ,2774 ,3077 ,3613	+8,7398 ,7062 ,9222 ,8686 ,7405

	Declination	H	··	Logarit	hms of		Dlifer	ence from th Right As		Catalogue.
No		Annual Precession	a'	<i>b'</i>	c' i		No.	fro M. C.		Declin.
139 139 139 139 140	7 26 48 32,76 8 48 10 35,24 9 59 55 9,84	-16,843 15,853 16,864 15,868 15,868	+9,8722 ,8216 ,8716 ,8727 ,8722	+9,7703 ,5528 ,7709 ,8358 ,7727	—1,1998 ,2001 ,2004 ,2005 ,2005	9,7871 ,7866 ,7861 ,7859 ,7859	2556 2557 2558 2562 2560	- 2,06 - 3,20 - 2,92 -17,89	S	+ 4,61 + 3,88 - 3,48 +43,49
140 140 140 140	02   58 31 1,00 03   29 29 34,87 04   29 5 5,16	16,886 15,896 16,924 15,935 16,939	+9,8663 ,8722 ,8306 ,8287 ,8698	+9,7369 ,8303 ,5927 ,6874 ,7721	1,2010 ,2013 ,2021 ,2023 ,2024	—9,7861 ,7846 ,7833 ,7828 ,7826	2563 2565 2567 2569 2570	- 1,77 - 1,52 - 0,33 - 2,50 - 2,85	- 0,80 - 1,97	+ 1,24 + 4,93 - 2,35 + 2,44 + 7,64
140 140 140 140 14	07 35 22 48,59 08 48 38 19,83 09 52 56 58,00	15,949. 15,963 15,967 16,006 16,023	+9,8710 ,8482 ,8698 ,8698 ,8548	+9,7902 ,6638 ,7769 ,8045 ,7009	—1,2027 ,2028 ,2032 ,2043 ,2047	—9,7821 ,7820 ,7813 ,7795 ,7786	2574 2572 2677 2581 2583	+ 1,34 - 1,99 - 1,45 - 2,25 - 1,88	$ \begin{array}{r}                                     $	- 1,49 - 3,54 + 7,29 + 3,15 + 4,48
14 14 14 14 14	12 64 14 5,23 13 30 12 0,51 14 47 30 52,94	16,027 16,030 16,082 16,107 16,114	+9,8075 ,8627 ,8233 ,8645 ,8669	+9,7746 ,8576 ,6062 ,7729 ,8033	-1,2048 ,2049 ,2063 ,2070 ,2072	—9,7784 ,7783 ,7767 ,7746 ,7742	2685 2688 2693 2695 2696	- 3,10 + 1,23 - 2,49 2,05 - 2,27	4,22	+ 2,74 + 8,06 - 6,98 + 2,01 0,94
14 14 14 14 14	17   57 33 27,51 18   32 40 12,39	16,124 16,127 16,148 16,162 16,162	+9,8669 ,8657 ,8357 ,8254 ,8621	-1-9,8138 ,8321 ,6388 ,6002 ,8468	1,2075 ,2070 ,2081 ,2035 ,2085	-9,7737 ,7786 ,7726 ,7718 ,7718	2598 2599 2601 2603 2603	- 1,89 - 2,23 + 0,06 - 2,97 - 2,18	_ = 3,00	+ 3,30 + 7,30 - 0,04 - 4,34 + 2,11
14 14	21 63 45 59,48 22 54 15 26,03 23 57 15 27,46 24 34 46 27,76 25 50 38	16,207	+9,8586 ,8639 ,8627 ,8395 ,8621	+9,8694 ,8173 ,8327 ,6645 ,7970	-1,2086 ,2097 ,2097 ,2100 ,2106	,7696 ,7690	2608 2613 2615 2614 2618	+ 2,66 - 3,92 - 1,56	— <del>4,</del> 98	+ 6,73 - 2,66 - 0,20 - 6,06
14 14 14	26   45 10 127   53 29 19,47 128   54 29 10,16 129   55 6 19,39 130   50 30 0,67	16,248 16,295	+9,8579 ,8627 ,8027 ,8609 ,8597	+9,7599 ,8141 ,8196 ,8242 ,7980	-1,2108 ,2107 ,2108 ,2121 ,2124	-9,7675 ,7676 ,7675 ,7050 ,7643	26 21 2623 2625 2631 2633	$ \begin{array}{r} -2,57 \\ -1,16 \\ -2,04 \end{array} $		+ 3,00 + 0,37 - 6,74 - 9,43
1:	431     53     20     38,78       432     53     9     36,36       433     29     28     8,73       434     47     48     52,60       435     26     32     12,23	16,336 16,343 16,356	+9,8603 ,8597 ,8215 ,8567 ,8096	+9,8150 ,8146 ,6037 ,7817 ,5631	—1,9126 ,2131 ,2133 ,2137 ,2145	,7618		$\begin{bmatrix} -2.51 \\ -0.52 \\ -1.24 \end{bmatrix}$	2,08	+ 9,91 + 4,00 + 0,62 + 5,73 - 2,74
1 1	436 45 10 37,88 437 42 56 33,14 438 66 49 55,01 439 53 30 41,21 440 46 10 65,1:	1 16,407 1 16,414 1 16,416	,8506 ,8555 ,8567	+9,7638 ,7466 ,8361 ,8187 ,7646	,2152 ,2153	,769 <b>1</b> ,7688 ,7586	265 265 265	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		$ \begin{array}{c c} -10,65 \\ + 2,20 \\ + 1,12 \\ + 2,64 \\ - 3,78 \end{array} $

No.	N.		No.	Right Ascen.	Annual		Logari	thms of	
140.	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	b	¢	d
1441 1442 1443 1444 1444	Antl. Pneum. Argus	7 8.9 7 8 6.7	53533	H. M. s. 9 40 4,62 40 14,71 41 2,15 41 8,26 42 48,27	s. +2,616 2,458 1,846 1,835 2,873	8,8024 8,8449 9,0156 9,0187 8,8753	+8,6469 ,6885 ,8562 ,8591 ,7087	+0,4176 ,3906 ,2662 ,2636 ,3753	+8,5085 ,6400 ,9444 ,9487 ,7072
1446 1447 1448 1449 1450	Antl. Pacum. Argus Antl. Pacum. Argus	7 7 7.8 8 8.9	3 3 3 3 3	43 5,74 43 25,37 43 28,38 43 45,93 43 55,64	2,532 1,969 2,452 2,535 1,804	8,8311 8,9909 8,8542 8,8319 9,0359	+8,6631 ,8221 ,6849 ,6641 ,8649	+0,4035 ,2942 ,3895 ,4040 ,2562	+8,5956 ,9079 ,6673 ,5962 ,9709
1451 1452 1453 1454 1455	Antl, Pucum. Argus	8 7.8 7 8.9	33433	44 3,18: 44 12,50 44 15,16 44 84,40 44 49,81	2,624 2,183 2,214 2,292 1,806	8,8087 8,9839 8,9252 8,9033 9,0386	+8,6369 ,7616 ,7525 ,7295 ,8638	+0,4189 ,3390 ,3452 ,3602 ,2567	+8,5178 ,8170 ,8023 ,7618 ,9741
1456 1457 1458 14 <i>5</i> 9 1460	Argus Antl. Pneum. Argus	6.7 7.8 6 7 7.8	33333	45 8,57 45 28,98 45 30,75 45 48,86 45 49,66	2,315.) 2,308 2,308 2,699 1,801	8,8982 8,9010 8,9014 8,7936 9,0433	+8,7220 ,7235 ,7235 ,6144 ,8644	+0,3645 ,3632 ,3632 ,4312 ,2565	+8,7512 ,7564 ,7570 ,4446 ,9800
1461 1462 1463 1464 1466	Argus	8 7 7 6,7 7.8	38888	46 10,89 46 11,96 46 13,03 46 25,47 46 53,55	2,030 2,058 1,858 1,685 2,311	-8,9832 8,9754 9,0298 9,0744 8,9043	+8,8028 ,7951 ,8492 ,8920 ,7207	+0,3075 ,3184 ,2690 ,2266 ,3638	+8,8948 8,8830 8,9615 9,0203 8,7610
1466 1467 1468 1469 1470	Antl. Pncum. Argus	6.7 5.6 7.8 7.8 8.9	3 3 3 3 3 3	46 54,04 46 57,84 46 58,89 47 9,02 47 13,44	2,691 2,724 2,605 2,419 2,035	-8,7975 8,7899 8,8204 8,8728 8,9852	+8,6139 ,6060 ,6365 ,6881 ,8005	+0,4299 ,4352 ,4158 ,3836 ,3086	4-8,4585 ,4190 ,5506 ,6948 ,8972
1471 1472 1473 1474 1475	Argus Antl. Pnoum.	7.8 7 6.7 7.8 7.8	3 3 5	47 14,83 47 32,70 47 58,80 48 11,50 48 14,42	2,430, 2,040 2,188 2,319 12,598	8,8697 8,9847 8,9433 8,9054 8,8243	+8,6849 ,7986 ,7555 ,7165 ,6349	+0,3856 ,3096 ,3400 ,3653 ,4146	+8,6876 ,8962 ,8302 ,7616 ,5600
1476 1477 1478 1479 1480	Antl. Pneum. Argus  Antl. Pneum.	7.8 9 6.7 8	33333	48 15,20 48 27,18 48 54,91 48 54,96 49 11,20	2,605 1,727 2,221 2,468 2,646	8,8226 9,0712 8,9363 8,8628 8,8131	+8,6335 ,8812 ,7447 ,6708 ,6201	+0,4158 ,2373 ,3465 ,3923 ,4226	+8,5544 9,0156 8,8175 8,6683 8,5167
1481 1482 1483 1484 1486	Argus π And, Poque. Argus	8.9 6.7 6.7 6.7 8.9	3 3 3 3 3	49 18,98 49 24,20 49 36,99 49 41,08 49 44,98	1,747 1,930 2,607 2,707 1,904	- 9,0689 <sub>1</sub> 9,0213 8,8245 8,7988 9, 294	+8,8756 ,8275 ,6298 ,6035 ,8342	+0,2423 ,2856 ,4161 ,432 <i>5</i> ,2797	+9,0123 8,9482 8,5569 8,4516 8,9593

	Declination.	Annual		Logari	hms of				he Brisbane scension	 
No.	(South.) Jan. 1. 1840.	Precession	a'	<i>b</i> '	c'	d'	No.	M.C.	om   <b>T.</b>	Declin.
1441 1442 1443 1444 1446	30 31 51,58 38 34 59,97 58 3 30,31 58 18 37,95 42 44 22,51	-16,427 16,437 16,473 16,477 16,562	+9,8228 ,8426 ,8525 ,8525 ,8457	+9,6197 ,7090 ,8437 ,8449 ,7491	-1,2155 ,2158 ,2168 ,2169 ,2191	—9,7580 ,7575 ,7555 ,7553 ,7505	2656 2658 2665 2668 2679	- 2,22 - 2,08 - 3,30 - 3,62 - 1,66	5.	- 1,64 + 4,82 + 5,31 + 1,14 + 3,02
1446 1447 1448 1449 1450	35 31 30,66 55 40 11,68 39 25 30,43 35 31 3,19 59 23 25,21	16,579 16,589 16,595 16,612 16,616	+9,8325 ,8500 ,8395 ,8312 ,8463	+9,6821 ,8349 ,7211 ,6828 ,8535	1,2195 ,2200 ,2200 ,2204 ,2205	.—9,7496 ,7491 ,7487 ,7477 ,7476	2681 2686 2684 2687 2690	- 2,42 - 3,36 - 2,87 - 2,06 - 3,51	- 3,85 - 4,55	- 4,34 - 2,69 - 4,07 - 6,28 - 4,73
1451 1452 1453 1454 1455	30 45 51,81 49 52 41,68 48 52 16,93 46 11 17,41 59 31 0,92	16,625 16,631 16,635 16,647 16,660	+9,8189 ,8488 ,8482 ,8463 ,8445	+9,6279 ,8026 ,7962 ,7779 ,8552	1,2207 ,2209 ,2210 ,2213 ,2217	→9,7470 ,7466 ,7464 ,7457 ,7449	2689 2691 2692 2696 2698	- 2,71 - 3,14 - 1,50 - 2,74 - 1,67		- 3,02 - 3,92 + 4,67 + 4,62 + 4,63
1456 1457 1458 1459 1460	45 45 52,40 45 47 58,52 26 35 8,70	16,676 16,693 16,696 16,712 16,709	+9,8445 ,8451 ,8439 ,8028 ,8420	-1-9,7782 ,7759 ,7763 ,5721 ,8577	1,2221 ,2225 ,2226 ,2230 ,2229	9,7440 ,7430 ,7428 ,7419 ,7421	2702 2703 2704 2705 2706	- 1,99 - 1,55 - 0,47 - 2,09 - 1,08	<u>- 2,03</u>	- 0,31 - 2,90 + 2,63 - 1,60 - 6,44
1461 1462 1463 1464 1465	58 40 27,17 61 59 44,63	16,725 16,725 16,728 16,738 16,763	# 9,8451 ,8451 ,8426 ,8388 ,8426	+9,8330 ,8290 ,8532 ,8678 ,7791	1,2234 ,2234 ,2234 ,2237 ,2244	9,7411 ,7411 ,7409 ,7404 ,7388	2707 2708 2709 2710 2717	— 2,06   — 1,84   — 1,15   — 2,27   — 0,98	<u>-4,01</u>	$\begin{array}{r} -0.74 \\ -0.14 \\ +2.30 \\ +3.18 \\ +9.93 \end{array}$
1466 1467 1468 1469 1470	25 10 58,52 32 28 57,87 41 33 23,31	16,763 16,767 16,767 16,776 16,776	+9,8041 ,7966 ,8195 ,8376 ,8439	+9,6834 ,5517 ,6527 ,7447 ,8347	2247	9,7388 ,7386 ,7386 ,7380 ,7380		2,73		- 4.10 - 2,90 + 6,07 - 3,79 + 4,81
1471 1472 1473 1474 1475	54 37 18,64 50 23 37,52 45 52 59,86	16,792  16,811  16,824	+9,8370 ,8426 ,8420 ,8401 ,8189	+9,7407 ,8347 ,8105 ,7802 ,6599	1,2247 ,2251 ,2256 ,2259 ,2261	,7359 ,7351	2722 2724	-1,73 $-2,63$ $-2,13$	3,04	- 3,84 + 2,48 + 1,38 + 2,41 + 6,11
1476 1477 1478 1479 1480	61 34 55,18 49 29 19,12 0 39 40 47,30	16,838 16,855 16,859	+9,8182 ,8344 ,8407 ,8319 ,8116	+9,6559 ,8687 ,8060 ,7304 ,6287	-1,2260 ,2362 ,2267 ,2268 ,2271	,7332 ,7330	2732	$\begin{vmatrix} + 1,04 \\ - 2,28 \\ + 0,34 \end{vmatrix}$	2,53 - 2,53 - 4,35	+46,73
148: 148: 148: 148: 148:	2	16,880 16,890 16,896	+9,8391 ,8370 ,8169 ,7993 ,8357	,8524 ,6581 ,5787	1,2272 ,2274 ,2276 ,2278 ,2278	,7316 ,7310 ,7306	273 273 2789	$\begin{vmatrix} -2,18 \\ 3 \\ -3,19 \\ -2,08 \end{vmatrix}$	5	1 000

No.	Names.	Mag.	No.	Right Ascen.	Annual		Logari	thms of	
		J	Obs.	Jan. 1, 1840.	Precesn.	a ·	1 6	) c	d
1486 1487 1488 1489	Antl. Pneum. Argus	7.8 7.8 7	$\begin{bmatrix} 3 \\ -3 \\ 3 \end{bmatrix}$	H. M. s. 9 50 4,39 50 50 21,58 50 28,83	s. +2,583 1,756 1,924	8,8321 9,0700 9,0264	+ 8,6355 ,8728 ,8283	+0,4121 ,4382 ,2842	+8,5808 9,0135 8,9548
1490	1	7.8	3	50 36,13	2,197 1,908	8,9480 9,0310	,7499 ,8324	,3418 ,2806	8,8360 8,9611
1491 1492 1493 1494 1495	Antl. Paeum. Argus	7 8 7.8 5 7.8	3 3 3	50 54,31 51 10,87 51 12,29 51 15,26 51 19,79	2,745 2,076 2,246 2,095 2,255	-8,7918 8,9859 8,9358 8,9806 8,9333	+8,5916 ,7848 ,7342 ,7796 ,7313	+0,4385 ,3172 ,3514 ,3212 ,3531	+8,4079 ,8958 ,8144 ,8876 ,8100
1498 1497 1498 1409 1500	Argus Antl. Pneum. Argus Antl. Pneum.	7 7 6.7 9 8	3 3 3 3 3	51 23,76 51 33,54 51 35,11 52 13,83 52 50,53	2,162 2,682 2,289 2,016 2,653	8,9616 8,8084 8,9238 9,0067 8,8188	+8,7592 ,6053 ,7208 ,8010 ,6102	+0,3348 ,4285 ,3596 ,3045 ,4237	+8,8574 ,4880 ,7927 ,7259 ,5258
1501 1502 1503 1504 1505	Argus Antl. Pneum. Argus	7.8 7.8 8.9 7.8 8	3 3 3 3 3	53 2,75 53 3,35 53 20,20 53 25,49 53 55,72	1,791 2,385 2,720 1,759 1,978	-9,0708 8,8984 8,8020 9,0~04 9,0231	+8,8618 ,6891 ,6913 ,8697 ,8104	+0,2531 ,3775 ,4346 ,2453 ,2962	+9,0135 8,7419 8,4503 9,0257 8,9485
1506  507  508  509  510	Argus Antl. Pnoum. Argus	8.9 7.8 7.8 7.8	4 3 3 3	54 54 12,86 54 31,93 54 56,94 54 57,65	1,778 1,781 2,508 2,250 1,881	-9,0772 9,0775 8,8642 8,9454 9,0537	+8,8613 ,8637 ,6487 ,7282 ,8364	+0,2499 ,2507 ,3993 ,4445 ,2744	+9.0215 9,0317 8,6620 8,8280 8,9901
511 512 513 514 515	Anti Pneum. Argus Anti Pneum. Argus	7 7 6.7 7 8	3 3 3 3 3	55 2,32 55 9,16 56 39,67 55 40,85 55 49,64	2,611 2,035 2,071 2,673 1,901	-8,8346 9,0108 9,0019 8,8186 9,0513	#8,6168 ,7927 ,7818 ,5979 ,8301	+0,4168 ,3086 ,3162 ,4270 ,2790	+8,5757 ,9304 ,9171 ,5153 ,9865
516 517 518 519 520	Argus Antl. Pneum.	7 89 8 7.8 7.8	3 3 3 3	55 52,63 55 58,87 56 16,82 56 21,51 56 22,48	2,167 1,898 2,115 2,692 2,731		十8,7525 ,8309 ,7679 ,6079	+0,3358 ,2783 ,3253 ,4203 ,4369	+8,8738 ,9877 ,9002 ,5615
521 523 523 524 525	Argus	8 9 7 8 8 9 6 7	3 3 4 4	56 24,84 56 32,74 56 55 42,97 56 55,10	2,116 2,030 2,304 1,829 1,901	-8,9908 9,0170 8,9330 9,0720 9,0548	+8,7673 ,7929 ,7095 ,8494 ,8293	+0,3255 ,3075 ,3625 ,2622 ,2790	+8,9000 8,9386 8,8049 9,0139 8,9909
526 527 528 529 530	Argus Antl, Pneum	6.7 8 9 6.7 9	3 3 3 5 5	57 1,36 57 1,78 57 15,70 57 34,00 57 37,71	2,364 2,078 2,218 2,715 1,977	-8,9156 9,0055 8,9625 8,8107 9,03 <i>5</i> 7	+8,6895 ,7780 ,7352 ,5823 ,8072	+0,3736 ,3176 ,3459 ,4338 ,2960	+8,7716 ,9215 ,8548 ,4741

<u> </u>	Declination	Annual		Logarit	hma of		Differ		ne Brisbane acension	Catalogue.
No.	(South.) Jan. 1, 1840.	Precession	a'	<i>b'</i>	c'	d'	No.		om	Declin.
1486 1487 1488 1489 1490	34 4 0,33 61 21 57 58 56,20 50 34 39,75 58 20 53,72	-16,912 16,918 16,927 16,927 16,934	+9,8195 ,8319 ,8351 ,8382 ,8344	+9,6749 ,8698 ,8651 ,8147 ,8570	-1,2282 ,2283 ,2286 ,2286 ,2287	-9,7296 ,7292 ,7286 ,7286 ,7282	2742 2743 2744 2745 2746	- 3,95 - 1,56 - 1,31 - 2,26	- 1,80	+ 3,74 + 5,17 - 0,36 + 2,97
1491 41492 1493 1494 1495	24 22 12,57 54 19 22,62 49 6 36,94 53 48 25,09 48 47 41,80	16,952 16,962 16,965 16,965 16,971	+9,7889 ,8363 ,8370 ,8363 ,8363	+9,6434 ,8374 ,8063 ,8347 ,8046	—1,2292 ,2295 ,2295 ,2295 ,2297	-9,7270 ,7264 ,7262 ,7262 ,7258	2747 2750 2751 2752 2753	- 3,37 - 3,42 - 1,78 - 2,41 - 2,60	——————————————————————————————————————	- 2,44 + 2,35 + 2,56 + 5,24 + 2,77
1496 1497 1498 1499 1500	51 52 42,41 28 32 30,66 47 39 6,27 56 6 9,81 30 35 8,98	16,974 16,983 16,983 16,985 17,046	+9,8363 ,8028 ,8357 ,8331 ,8069	+9,8238 ,6077 ,7970 ,8481 ,6367	1,2298 ,2300 ,2300 ,2307 ,2316	-9,7256 ,7250 ,7250 ,7232 ,7210	2754 2755 2758 2763 2764	- 2,09 - 2,57 - 2,09 - 2,14	- 2,68 - 0,53	+ 1,12 + 4,05 + 4,00 + 0,21 + 6,84
1501 1502 1503 1504 1505	61 10 11,27 44 11 26,13 26 23 22,64 61 49 18,65 57 21 47,81	17,048 17,061 17,066 17,066 17,088	+9,8261 ,8306 ,7938 ,8241 ,8287	+9,8724 ,7733 ,5785 ,8755 ,8562	—1,2317 ,2317 ,2321 ,2321 ,2327	-9,7207 ,7205 ,7195 ,7195 ,7181	2767 2766 2768 2769 2773	- 2,30 - 2,80 - 0,78 - 2,33 - 1,74		+ 6,75 + 4,14 + 1,93 + 2,62 + 0,82
1506 1507 1508 1509 1510	61 33 61 33 8,26 38 40 57,53 49 42 37,10 59 43 43,34	17,088 17,100 17,118 17,137 17,137	+9,8228 ,8228 ,8222 ,8299 ,8241	+9,8751 ,8753 ,7293 ,8145 ,8684	—1,2327 ,2330 ,2335 ,2339 ,2339	-9,7181 ,7173 ,7160 ,7148 ,7147	2774 2776 2777 2783 2784	$ \begin{array}{r}     \hline                                $		+ 7,55 + 10,65 + 3,79 - 5,02
1511 1512 1513 1514 1516	33 24 18,03 56 10 45,41 55 19 43,32 29 48 32,53 59 27 29,54	17,142 17,146 17,166 17,172 17,179	+9,8109 ,8267 ,8267 ,8007 ,8222	+9,6733 ,8618 ,8480 ,6297 ,8683	-1,2341 ,2341 ,2347 ,2348 ,2350	-9,7143 ,7141 ,7127 ,7123 ,7118	2782 2786 2789 2788 2781	- 2,51 - 3,22 - 2,97 - 2,09 + 0,19	- 2,89 	+ 6,69 0,00 - 2,66 - 4,19 - 2,82
1516 1517 1518 1519 1520	59 31 30,90 54 14 0,42 32 27 58,67	17,179 17,197 17,202	+9,8274 ,8222 ,8267 ,8069 ,7889	+9,8332 ,8686 ,8428 ,6637 ,5781	-1,2350 ,2350 ,2354 ,2356 ,2356	-9,7118 ,7118 ,7106 ,7101 ,7101	2790 2792 2796 2794 2795	$\begin{bmatrix} -5,04 \\ -1,83 \end{bmatrix}$	3,43 	+ 2,37 - 8,53 + 3,56 - 1,86 - 3,88
1521 1522 1523 1524 1526	56 34 48,05 48 5 60 59 45,98	17,208 17,202 17,193	+9,8261 ,8241 ,8274 ,8189 ,8195	+9,8429 ,8554 ,8055 ,8763 ,8703	—1,2356 ,2357 ,2356 ,2354 ,2361	-9,7101 ,7097 ,7101 ,7108 ,7087	2801 2798 2797	-3,39 +29,83		$ \begin{array}{r rrrr}  & -1,65 \\  & +3,12 \\  & +1,41 \\  & -2,41 \end{array} $
1526 1527 1528 1529 1530	55 29 9,22 51 16 32,97 27 24 51,80	2 17,244 17,241 17,253		,5984	—1,2363 ,2366 ,2366 ,2369	,7074 ,7065	2807 2809	+17,48 -2,06 -4,46		+ 0,72 - 5,01 + 2,08 - 5,61 + 1,70

No.	Names,		No.	Right Ascen.	Annual		Loga	rithms of	
	raines,	Mag.	О ва.	Jan. 1, 1840.	Precesn.	a		c	$\frac{1}{d}$
1631 1632 1533 1534 1635	Argus Antl. Pneum. Argus	7.8	5 3 3 3	9 57 51,52 57 56,21 57 56,65 58 7,98	# 1,920 1,924 1,825 2,716 2,324	9,0518 9,0792 8,8112	+ 8,8233 ,8222 ,8491 ,5808 ,7005	,2842 ,3927	+ 8,9878 8,9864 9,0227 8,4748 8,8005
1636 1637 1638 1539 1540	Antl. Pnoum, Argus Antl. Pnoum, Argus	6.7 7.8 7 7	3 1 3 1 2	58 20,96 58 30,33 58 30,51 58 29,88 58 35,02	2,584 1,926 2,636 2,233 2,473	-8,8499 9,0538 8,8346 8,9616 8,8850	+8,6177 ; ,8213 ,6018 ; ,7288 ,6522	+0,4123 ,2844 ,4209 ,3489	-1-8,6152 8,9889 8,5664 8,8524 8,7055
1541 1542 1543 1544 1546	o Antl. Pneum.	7 6.7 6.7 7 7.8	3 1 3 3	58 36,46 58 38,41 58 56,21 59 0,62 59 3,51	2,677 1,845 2,229 2,250 <b>2,</b> 136	-8,8233 9,0763 8,9640 8,9576 8,9934	+8,5894 ,8433 ,7296 ,7228 ,7584	+0,4276 ,4619 ,3481 ,3522 ,3296	+8,5240 9,0187 8,8562 8,8454 8,9025
1546 1547 1548 1549 1550	Antl . Pneum. Argus	6.7 6.7 7 7 8	3 3 3 3 3	59 29,66 10 0 9,98 0 47,96 1 8,08 1 13,33	2,070 2,232 2,268 2,577 2,226	9,0149 8,9669 8,9574 8,8581 8,9723	+8,7781 ,7272 ,7148 ,6140 ,7276	+0,3160 ,3487 ,3556 ,4111	+ 8,9342 8,8601 8,8438 8,6333 8,8681
1551 1552 1553 1654 1555	Argus Anti. Pneum. Argus	6.7 7.8 7.8 6.7 7	3 3 3 3 3	1 18,03 1 23,33 2 28,07 2 38,76 2 48,41	2,347 2,618 2,658 2,608 2,354	-8,9333 8,8458 8,8363 8,8514 8,9353	+8,6883 ,6005 ,5860 ,6014 ,6838	+0,3705 ,4180 ,4245 ,4163 ,3718	+8,8010 8,5962 8,5015 8,6111 8,8033
1556 1557 1558 1559 1560	Q Argus	7 5.6 7 7 8	3 3 3 6	2 49,75 2 63,07 2 67,04 3 26,31 3 36,67	2,046 2,261 1,868 2,379 2,058	-9,0336 8,9661 9,0855 8,9289 9,0327	+8,7821 ,7143 ,8337 ,6747 ,7776	4-0,3109 ,3543 ,2714 ,3764 ,3134	+8,9593 8,8568 9,0293 8,7908 8,9576
1561 1562 1563 1564 1565	Antl. Pneum. Argus Antl. Pneum.	6.7 8 7 7	3.	3 51,51 3 54,25 3 54,61 3 4 44,15	2,559 1,962 2,368 2,061 2,641	8,8701 9,0622 8,9338 9,0331 8,8459	+8,6138 ,8059 ,6776 ,7762 ,5867	+0,4081 ,2927 ,3744 ,3141 ,4218	+8,6609 8,9982 8,7996 8,9581, 8,6885
1666 1567 1568 1569 1570	Antl. Pneum.		3 3 3 2	4 45,50 4 52,32 5 8,56 5 32,66 5 58,39	2,728 2,625 2,544 2,718 2,754	-8,8202 8,8511 8,8780 8,8246 8,8153	+8,5597 ,5904 ,6161 ,5606 ,5494	+0,4368 ,4191 ,4055 ,4342 ,4399	+8,4896 8,6050 8,6790 8,6065 8,4612
1571 1572 1573 1574 1575	Argus Antl. Pneum, Argus	6.7 7	3 3 3 3 3	6 6,42 6 7,44 6 13,06 6 21,56 6 39,43	1,920 2,185 2,078 2,667 1,935	9,0824 9,0011 9,0356 8,8412 9,0800	+8,8163 ,7347 ,7688 ,6735 ,8115	+0,2833 ,3394 ,3176 ,4260 ,2867	+9,0243 8,9103 8,9606 8,5686 9,0209

'	Declination.	Angual		Logarit	hms of		Differ	ence from the Right As		Catalogue.
No.	(South.) Jan. 1. 1840.	Annual Precession	a'	6'	c'	d'	No.	from M.C.	т,	Declin.
1531 1532 1533 1534 1536	69 24 20,08 69 19 61 23 1,83 27 25 19,28 47 40 21,46	" 17,265 17,266 17,271 17,274 17,280	-+9,8176 ,8182 ,8149 ,7917 ,8241	+9,8703 ,8699 ,8789 ,6991 ,8046	-1,2372 ,2372 ,2372 ,2374 ,2375	—9,7057 ,7057 ,7055 ,7050 ,7046	2815 2814 2816 2813 2813	$ \begin{array}{c c}  & s. \\  & 1,77 \\  \hline  & 1,31 \\  & 2,09 \\  & 2,12 \end{array} $		+ 0,50 + 1,11 + 3,06
1536 1537 1538 1539 1540	35 36 32,70 59 25 29,54 32 36 52,45 51 1 41 23 46,91	17,291 17,295 17,297 17,297 17,298	+9,8109 ,8169 ,8041 ,8235 ,8189	+9,7013 ,8711 ,6679 ,8269 ,7566	-1,2378 ,2379 ,2380 ,2380 ,2380	9,7087 ,7035 ,7033 ,7033 ,7033	2819 2827 2822 2824 2825	2,57 1,83 1,93 1,61 5,38		- 3,46 + 7,77 - 3,39 + 0,23
1541 1542 1543 1544 1545	30 6 55,25 61 6 35,88 51 15 0,14 50 32 20,56 54 10 29,20	17,310 17,301 17,315 17,317 17,321	+9,7980 ,8136 ,8222 ,8228 ,8209	+9,6371 ,8785 ,8286 ,8244 ,8457	1,2383 ,2381 ,2384 ,2385 ,2386	9,7024 ,7031 ,7020 ,7018 ,7016	2823 2831 2833 2834 2835	- 2,88 - 2,28 - 3,14 - 2,10 - 1,70	<del>2,8</del> 5	- 3,34 + 0,22 - 0,94 + 4,16 + 1,75
1546 1547 1548 1549 1550	56 7 19,85 51 24 39,01 50 17 58,94 36 33 10,89 51 45 20,83	17,339 17,368 17,397 17,411 17,417	+9,8182 ,8202 ,8189 ,8082 ,8176	+9,8563 ,8310 ,8249 ,7141 ,8348	-1,2390 ,2397 ,2405 ,2408 ,2410	9,7003 ,6981 ,6959 ,6948 ,6943	2837 2840 2814 2845 2847	- 2,72 - 2,63 - 1,28 - 1,49 + 0,01	- <del>3,72</del>	-57,61 + 3,98 + 6,66 - 3,39 +5,11,30
1551 1552 1553 1554 1556		17,420 17,423 17,471 17,469 17,483	+9,8176 ,8041 ,7980 ,8041 ,8156	-1-9,8067 ,6895 ,6656 ,7000 ,8087	-1,3410 ,2411 ,2423 ,2428 ,2426	9,6941 ,6939 ,6901 ,6903 ,6892	2849 2850 2855 2857 2859	- 2,36 - 2,21 - 1,19 - 2,75 - 2,39		+ 3,69 - 0,44 + 6,71 - 6,70 + 4,39
1556 1557 1558 1559 1560	61 26 19,17 46 39 42,86	17,483 17,486 17,486 17,509 17,517	+9,8102 ,8149 ,8034 ,8142 ,8089	+9,8664 ,8315 ,8845 ,8032 ,8665	—1,2426 ,2427 ,2427 ,2432 ,2435	-9,6892 ,6890 ,6890 ,6872 ,6865	2861 2860 2862 2863 2864	3,50	— <del>1,88</del> — <del>3,0</del> 5	+ 0,18 + 0,93 + 3,99 + 5,65 - 4,66
1561 1562 1563 1564 1566	57 15 57 15 57 15	17,628 17,529 17,529 17,534 17,665	+9,8069 ,8041 ,8136 ,8069 ,7980	+9,7328 ,8778 ,8076 ,8669 ,6854	-1,2437 ,2437 ,2437 ,2439 ,2446	—9,6856 ,6856 ,6856 ,6851 ,6826	2865 2867 2866 2868 2872	-0,67 $-2,88$		$\begin{array}{c c} + 2,36 \\ - 0,22 \\ - 0,21 \\ + 3,17 \end{array}$
1566 1566 1566 1569	34 32 15,47 39 13 22,15 28 42 36,37	17.601	+9,7846 ,7993 ,8055 ,7860 ,7781	+9,6122 ,6967 ,7442 ,6255 ,6900	1,2447 ,2448 ,2451 ,2455 ,2460	-9,6824 ,6821 ,6812 ,6796 ,6782	2873 2874 2876 2877 2881	$ \begin{array}{c c} -2,90 \\ -1,87 \\ -2,09 \\ -1,61 \end{array} $		$\begin{array}{r} -0.12 \\ -4.69 \\ -1.2.66 \\ +4.75 \\ +0.91 \end{array}$
167 167 167 167 167	2 54 11 44,30 3 57 16 20,14 4 32 14 39,95	17,624 17,626 17,635	,7931	+9,8859 ,8533 ,8693 ,6719 ,8855		,6775 ,6768	2888 2888 2888	$\begin{bmatrix} -2,14 \\ -2,70 \\ -2,15 \end{bmatrix}$	- 3,77	+ 0,46 + 2,70 - 2,03 + 0,08 + 5,44

No.	Names.	Man	No.	Right Ascen.	Annuel	}	Logarit	hms of	
No.	Mames.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	1 6	C	d
1576 1577 1578 1579 1580	Argus Antl. Pneum. Argus	7.8 7.8 7.8 6 7	3 3 3 3 3	11. M. S. 10 6 41,43 6 58,11 7 7,85 7 13,17 7 20,79	+ 2,585 2,546 2,547 2,304 2,291	-8,9361 8,8821 8,8820 8,9653 8,9703	+8,6672 ,6117 ,6110 ,6941 ,6984	+0,3775 ,4059 ,4060 ,3625 ,3600	+8,8012 ,6864 ,6860 ,8525 ,8607
1581 1582 1583 1584 1585	Argus	6.7 7 7 7	3 3 3 3	7 37,11 7 38,24 7 39,75 8 9,22 8 10,36	2,016 2,143 2,601 1,944 2,512	-9,0596 9,0200 8,8989 9,0832 8,8965	+8,7865 ,7466 ,6262 ,8076 ,6207	+0,3045 ,3310 ,3979 ,2887 ,4000	+8,9934 8,9377 8,7247 9,0246 8,7188
1586  587  588  589  1590	Argus Antl. Pneum. Argus	8 6.7 7 7.8 7	4 3 3 3 3	8 19,79 8 21,15 9 21,43 9 31,12 10 35,71	2,295 2,618 2,208 2,346 2,041	-8,9719 8,8610 9,0041 8,9580 9,0623	-+ 8,6954 ,6843 ,7234 ,6763 ,7757	+0,3608 ,4180 ,3440 ,3703 ,3098	+8,8627 ,6276 ,9132 ,8384 ,9960
1591 1592 1593 1594 1595	Argus Antl. Pneum Argus Antl. Pneum	6.7 7.8 6.7 7	4 3 3 3 3	10 49,66 11 12,78 11 36,79 11 40,21 12 3,95	2,438 2,390 2,626 2,542 2,662	8,9315 8,9447 8,8658 8,8952 8,8646	+8,6436 ,6550 ,5739 ,6033 ,5609	+0,3861 ,3800 ,4193 ,4052 ,4252	+8,7889 ,8134 ,6364 ,7112 ,6005
1596 1597 1598 1599 1600	Argus	8.9 7 7 8	3 3 5 3	12 20,74 12 12 44,54 12 48,89 12 52,42	2,323 2,197 2,363 2,198 2,469	-8,9751 9,0196 8,9660 9,0197 8,9243	-#8,6800 ,7230 ,6688 ,7225 ,6267	+0,3660 ,3418 ,3716 ,3420 ,3925	+8,8653 ,9347 ,8498 ,9348 ,7727
1601 1602 1603 1604 1605	Argus Antl. Pneum. Argus Antl. Pneum.	8.9 7 7.8 8 6.7	3 3 3 3	12 54,54 13 2,56 13 8,78 13 8,74 13 21,46	2,201 2,688 2,203 2,203 2,708	9,0189 8,8482 9,0191 9,0191 8,8423	+8,7213 ,5497 ,7203 ,7203 ,5423	+0,3426 ,4294 ,3430 ,3430 ,4326	+8,9336 ,5760 ,9338 ,9338 ,6546
1606 1607 1608 1609 1610	Argus	6.7 7.8 6.7 6.7	3 3 3	13 <b>2</b> 2,30 13 <b>3</b> 7,32 13 36,68 13 <b>4</b> 6,12	2,422 2,335 2,238 2,430 2,208	-8,9429 8,9747 9,0088 8,9412 9,0197	+8,6432 ,6737 ,7078 ,6392 ,7181	+0,3842 ,3683 ,3499 ,3856 ,3440	+8,8083 ,8640 ,9182 ,8047 ,9344
1611 1612 1613 1614 1615	Antl. Pnoum, Argus Antl. Pnoum, Argus	7 7.8 8 7	3 3 3	13 63,41 14 4,93 14 14,12 14 16,38 14	2,795 2,161 2,737 2,436 2,077	8,8171 9,0367 8,8350 8,9405 9,0657	+8,5145 ,7335 ,6308 ,6364 ,7606	#0,4464 ,3346 ,4373 ,3867 ,3174	+8,4365 ,9590 ,5228 ,8031 ,9992
1616 1617 1618 1619 1620	Argus Antl. Pneura Argus	8 7 7 8	3 3 3	14 47,00 14 36,69 15 2,00 15 24,70	2,178 2,087 2,744 2,138 2,093	-9,0335 9,0631 8,8341 9,0493 9,0651	+8,7268 ,7578 ,5268 ,7397 ,7548	#0,4725 ,3195 ,4384 ,3300 ,3 <b>2</b> 08	# 8,9541 ,9066 ,5167 ,9763 ,9980

	Declination .	Annual		Logarit	hms of		Differ	ence from the Right A		Catalogue.
No.	(South.) Jan. 1, 1840.	Precession	a'	<i>b'</i>	c'	d'	No.		m T.	Declin.
1576 1577 1578 1579 1580	47 7 44,32 39 33 20,09 39 31 9,19 50 26 30,25 50 57 54,95	77,646 17,660 17,665 17,668 17,673	+9,8082 ,8028 ,8034 ,8062 ,8065	+9,8099 ,7493 ,7492 ,8325 ,8358	-1,2466 ,2470 ,2471 ,2472 ,2473	—9,6759 ,6747 ,6742 ,6740 ,6785	2890 2892 2894 2895 2896	3.17 - 3,17 - 3,09 - 2,66 - 2,67	$-\frac{3.}{2,80} \\ -\frac{3,27}{}$	+ 3,66 - 0,47 - 0,57 + 4,26 + 2,85
1581 1582 1583 1584 158¢	59 7 34,86 55 47 43,36 42 0 56,91 60 52 1,25 41 35 23,44	17,684 17,687 17,687 17,706 17,709	+9,7966 ,8014 ,8041 ,7917 ,8028	+9,8794 ,8634 ,7716 ,8876 ,7685	-1,2476 ,2476 ,2476 ,2481 ,2482	—9,6726 ,6723 ,6723 ,6707 ,6704	2899 2900 2898 2909 2906	2,25 1,33 2,01 3,04 2,17	- 2,66 	+ 3,32 - 0,75 + 1,46 - 1,72 - 1,14
1586 1587 1588 1589 1690	51 1 16,95 35 43 28,76 54 10 45,83 49 22 52,63 59 6 24,21	17,714 17,717 17,752 17,760 17,803	+9,8041 ,7959 ,7993 ,8021 ,7903	+9,8372 ,713 I ,8564 ,8279 ,8822	1,2483 ,2484 ,2492 ,2494 ,2505	9,6699 ,6697 ,6666 ,6689 ,6620	2911 2910 2920 2921 2926	- 2,39 - 1,83 - 4,92 - 3,34 - 5,68	2,50	+ 3,17 - 5,17 + 6,19 + 2,11 - 3,84
1591 1592 1593 1594 1596	40 52 9,83	17,814 17,830 17,849 17,865	+9,8000 ,7986 ,7910 ,7960 ,7867	+9,8063 ,8179 ,7193 ,7668 ,6959	-1,2508 ,2511 ,2516 ,2516 ,2520	—9,6610 ,6595 ,6578 ,6578 ,6563	2928 2931 2932 2933 2936	- 2,14 - 1,72 - 1,33 - 3,33 - 2,61	- 3,22 - 2,68	+ 1,82 + 4,27 - 0,84 - 1,83 + 6,57
1596 1597 1598 1599 1600	55 18 49 54 58,71 55 18 57,21	17,875 17,888 17,894 17,894 17,896	+9,7952 7910 7952 7896 7959	+9,8406 ,8658 ,8346 ,8659 ,7993	1,2522 ,2526 ,2527 ,2527 ,2628	-9,6553 ,6541 ,6536 ,6536 ,6533	2937 2939 2941 2943 2942	$ \begin{array}{r}  -1,35 \\  -2,43 \\  -1,20 \\  -2,46 \end{array} $		+ 6,54 - 2,21 - 4,66 + 2,64
1601 1602 1603 1604 1605	32 19 35,54 55 13 17,17 55 13 18,08	17,896 17,904 17,907 17,907 17,917	+9,7903 ,7832 ,7896 ,7896 ,7803	+9,8655 ,6795 ,8658 ,8658 ,6636	-1,2528 ,2529 ,2530 ,2530 ,2633	-9,6533 ,6525 ,6523 ,6523 ,6513	2944 2945 2946 2947 2948	$ \begin{array}{c c} -3,37 \\ -2,25 \\ -2,12 \end{array} $		$\begin{array}{c c} + 6,97 \\ - 1,34 \end{array}$
1606 1608 1608 1610	50 45 58,59 54 13 36,08 54 53 45,95	17,916 17,925 17,925 17,933 17,933	+9,7952 ,7931 ,7903 ,7938 ,7882	,8408 ,8609 ,8153	,2535 ,2535 ,2536	,6505 ,6498	2951 2952 2954	$ \begin{array}{c c} -2,62 \\ -1,82 \\ -2,90 \end{array} $	- 2,64 - 3,75	
1613 1613 1613 1614	2	17,943 17,951	,7853 ,7752 ,7931	,87.42 ,6400 ,8148	,2539 ,2541 ,2541	,6488 ,6480 ,6480	2959 2960 296	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3,87	
161 161 161 161 162	7.) 58 51 4,44 8  28 45 5,21 9  57 40 40,40	17,967 117,982	,7.803 - ,7723 - ,7810	,8851 ,6355 ,8802	2545 2548 258	6449 6449 6436	296  $  297 $ $  297 $	$ \begin{array}{c cccc} 6 & - & 2,71 \\ 0 & - & 2,24 \\ 5 & - & 2,16 \end{array} $		+ 2,47 - 1,14 + 2,16 - 0,64

,	37		No.	Right Ascen.	Annual		Logar	ithms of	
No.	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	а	b	c	d
1621 1622 1623 1624 1625	Antl. Pneum.	6.7 9 9 8.9	3 - 3 6 3	H. M. 8. 10 15 63,73 16 16 43,88 16 43,47 16 44,00	2,747 2,015 2,017 2,017	8,8374 8,8357 9,0935 9,0663 9,0937	+8,5253 ,5210 ,7785 ,7503 ,7777	+0,4374 ,4389 ,3043 ,3224 ,5047	+8,5282 8,5195 9,0350 8,9993 9,0358
1626 1627 1628 1629 1630	Argus	8.9 7.8 9 8 7.8	3 3 3 3	17 14,26 16 24,85 17 56,30 18 0,30 18 1,19	2,011 2,162 2,035 2,133 2,178	-9,0973 9,0486 9,0931 9,0607 9,0454	+8,7791 ,7293 ,7706 ,7382 ,7232	+0,3034 ,3340 ,3086 ,3290 ,3881	-1-9,0404 8,9744 9,0346 8,9912 8,9698
1631 1632 1633 1634 1636	Antl, Pneum, Argus	7 9 6 7.8	4 3 3 8 3	18 1,79 18 13,66 18 25,88 18 30,79 18 39,34	2,757 2,124 2,659 2,294 2,401	8,8353 9,0645 8,9067 9,0059 8,9659	+8,5129 ,7414 ,6823 ,6812 ,6406	+0,4404 ,3271 ,4081 ,3606 ,3809	+8,6128 8,9964 8,7295 8,9113 8,8458
1636 1637 1638 1639 1640	Argus Anth Pneum, Argus	7.8° 7.8 6.7 7	3 3 3 2	18 47,18 18 53,33 19 12,60 10 25,59 19 29,96	2,104 2,050 2,166 2,616 2,158	9,0735 9,0915 9,0540 8,8878 9,0676	+8,7474 ,7651 ,7259 ,6584 ,7283	+0,3930 ,3117 ,3857 ,4176 ,3340	+9,0084 9,0324 8,9814 8,0827 8,9804
1641 1642 1-48 1-44 1646	Argus	7.8 7 7 6.7	4 3 3 3 3	19 39,76 20, 2,80 20 7,17 20 39,69 20 51,74	2,284 2,317 2,467 2,294 2,637	9,0139 9,0029 8,9466 9,0135 8,9219	+8,6835 ,6706 ,6139 ,6782 ,5863	+0,3587 ,3649 ,3922 ,3606 ,4043	+8,9229 ,9058 ,8097 ,9219 ,7601
1646 1647 1648 1649 I		7.8 8:9 6 6:7	3 3 3	20 59,84 21 21 26,58 21 28,07 21 29,85	2,214 2,335 2,440 2,216 2,437	-9,0439 : 9,0002 8,9612 9,0147 8,9624	+8,7070 ,6623 ,6219 ,7054 ,6227	+0,3452 ,3683 ,3874 ,3466 ,3869	+8,9666 ,9014 ,8354 ,9676 ,8376
1651 1662 1653 1654 1655		8 5 7 7 7.8	3 3 3	21 41,96 22 1,12 22 1,67 22 47,63 23 8,41	2,057 2,184 2,647 2,241 2,116	9,1004 9,0582 8,8824 9,0411 9,0864	+8,7601 ,7163 ,6401 ,6951 ,7387	+0,3132 ,3392 ,4227 ,2504 ,3256	1-9,0432 8,9864 8,6647 8,9018 9,0243
1656 1657 1658 1659 1660			3 3 3 3		2,165 2,051 2,805 2,314 2,553	-9,0700 9,1092 8,8296 9,0172 8,9248	+8,7213 ,7601 ,4804 ,6665 ,5720	+0,3365 ,3120 ,4479 ,3644 ,4070	+9,0023 9,0541 8,4666 8,9262 8,7631
662 1663 1664 1665	Anti-Paeum. Argue	7 7 7	3 3 3 3	24 10,39 24 17,24 24 17,36 24 53,44 24	2,590 2,590 2,699 2,654 2,555	8,9101 8,9100 8,8682 8,9263 8,9265	+8,5566 ,5569 ,5141 ,5694 ,5685	+0,4133 ,4133 ,4849 ,4074 ,4074	+8,7308; 8,7307 6,6196; 8,76 <b>56</b> ; 8,76 <b>5</b> 7

1	I Dusting the		<u> </u>	Lagani	thms of		Diffe		he Brisbane	Catalogue.
No.	Declination. (South.)	Annual		rogan			37-	Right A	scension	Daslin
	Jan. 1. 1840.	Precession	a'	b'	c'	d'	No.	M.C.	om   T.	Declin.
	<u> </u>   0 / //	1 1	<u> </u>	<u> </u>	<u> </u>	<u></u>	11	3.	s.	<del></del>
1621	29 21 17,17	18,015	+9,7730	+9,6445	-1,2556	9,6416	2978	_ 3,12		2,10
1622	28 50	18,035	,7708	,6379	,2561	6395	2979			
1623	61 2 31,52	18,038	,7716	,8964	2562	,6392	2983	13,62		3,70
1624	58 56 50,93	18,046	,7760	,8874	,2564	,6385	2985	2,36	,	+ 6,80
1625	61 2 31,63	18,046	,7716	,8966	,2564	,6385	2986	— 2,66		4,00
1626	61 15 55,86	18,064	+9,7694	+9,8979	1,2568	<b>9,</b> 6366	2988	- 3,04		+ 5,57
1627	57 27 35,05	18,071	,7760	,8x10	2570	. ,6358	2990	+57,73		2,33
1628	60 54 29,29	18,096	,7686	,8972	2576	,6332	2996	+4,82		+ 3,30
1629	58 23 50,36	18,096	,7730	,8862	,2576	,6332	2994	<b>2,0</b> 3	<del></del>	+ 8,55
1630	57 8 40,69	18,094	,7752	.8800	,2575	,6334	2993	_ 2,52		<i>—</i> ;5,23
1631	28 22 57,20	18,096	+9,7679	+9,6332	-1,2576	-9,6332	2992	_ 2,68	· <u></u>	+ 2,40
1632	58 42 10,47	18,101	,7723	,8876	2077	,6327	2997	3,22		0,90
1633	: 41 39 18,97	18,111	,7846	,7789	2579	,6316	3000	- 2,67	<b>—2,4</b> 3	+ 1,39
1634	53 30 40,51	18,114	,7798	,8615	,2580	,6313	3001	2,84		— 0,58
1635	49 17 39,93	18,119	,7832	,8361	,2581	,6308	3002	3,40		+ 1,46
1636	59 22 52,56	18,124	+9,7694	+9,8912	-1,2582	9,6303	3003	1,69	, <u>,</u>	— 2,8β
1637	60 44 31,93	18,126	7664	,8972	2583	,6300	3004	2,70	<del></del> -	-2,17
1638	57 45 52,22	18,139	,7716	,8841	,2586	,6286	3007	-2,32		+ 3,12
1639	38 32 54,03	18,148	,7810	,7519 ,8857	,2588 , <b>2</b> 588	,6276 ,6276	3009	-3,12 $-3,46$	<u>্বিলেশ্ব</u>	1,77
1640	58 3 35,64	18,148	,7708	,0007	20000		() (			
1641	54 10 44,45	18,150	+9,7760	+9,8661	1,2590	9 <b>,6</b> 268		- 2,53		+ 1,33
1642	53 4 40,87	18,171	,7767	,8604	,2594	,6251		- 1,98		+ 0.42 + 2.95
1643		18,173   18,193	7818, 7738	,8207 8664	,2594 ,2599	,6249 ,6227	3016	-3,72 $-2,13$	en i	-0.52
1644 1645	54 3 50,65 43 31 35,58	18,203	7803	. ,7964	2601	,6216	3018	- 2,19	3,26	+ 5,44
1030			i.				∯			\$ 1.00
1646	56 47 30,77		+9,7694	+9,8810	-1,2602		3019	2,29	- 4,66	+ 4,34
1647	52 41	18,212 18,222	7752	,8592 ,8330	,2604 ,2606		3020 3 <b>0</b> 21	- 1,59		-10,78
1648 1649		18,222	7672	,881,5	12006			- 2,65	4,24	+ 2,35
1650		18,224	37781	,8340	2606	,6191	3022	1,08		+ 5,83
1		'				0.0100	3028	1,85	(*	+ 4,61
1651	61 12 0,12	18,230 18,242	+9,7581 ,7642	+9,9016 ₽873,	1,2608 ,2611	-9,6186 6172	3031	-2,32	- 3,03	+1,20
1652		18,242	,7752	,7415	,2611	,6169	3029	— 1,06		+26,71
1654		18,270	,7649	,8806	2617	,6138	3035		- 2,29	13,97
1655		18,283	,7574	,8981	,2620	,6124	3036	- 3,47	, <del>, , , , , , ,</del> ,,,	+ 1,45
1000	169 AD DE 50	18,289	+9,7597	+9,8925	-1,2622	-9,6116	3038	- 2,47	l	+ 1,84
1656 1657		18,292	,7489	,9053	,2623	,6113	3039	<b>5,</b> 99	The Contraction	4,46
1658		18,292	7543	5975	,2623	6113	3037	<b>—</b> 1,98.		+ 0,39
1659	54 9 31,72	18,304	,7664	8696	,2625	,6099	3043	- 2,22		+ 6,46
1660		18,318	,7738	,7993	,2629	,6082	3045	-2,62		+ 0,77
1661	41 24 1,21	18,323	+9,7731	+9,7818	-1,2630	-9,6076	3047			+ 0,94
1662			,7731	7817	2629	,6079	3048			2,27
1663	34 18 18,05	18,327	,7679	5,7125	,2631	,6070	3049			$\frac{1}{1} = \frac{9.75}{5.02}$
1664	43 39 46,67	18,346	,7723	,8009	,2685	,6047	3052		10.00	5,03
1665	43 39	18,353	,7716	8011	,2687	,6039	3056			1-14-77
Street	1	L	<u> </u>	1	100 100 100	**************************************		<del></del>	Company of the part	

No.	<b>X</b> 7	B/2	No.	Right Ascen	Annual		Logarit	hms of	
No.	Names.	Mag.	Obs.	Jan. 1, 1840	Precesa.	a	<i>b</i>	C	d
1666 1667 1668 1669 1670	Argus	7.8 8 7 8 6.7	3 3 3 3 3	и. м. s. 10 24 58,58 25 9,42 25 9,86 26 22,77 25 42,74	s, +2,115 2,233 2,358 2,220 2,556	-9,0942 9,0527 9,0056 9,0587 8,9279	+8,7370 ,6948 ,6474 ,6994 ,5669	4-0,3253 ,3489 ,3725 ,3463 ,4076	+9,0342 8,9776 8,9076 8,9859 8,76 <b>8</b> 3
1671 1672 1673 1674 1675	Argus Antl. Pneum. Argus	6.7 8 8 7 9	3 3 5 5 5	26 49,06 25 52,96 26 21,95 26 27,51 26 36,16	2,219 2,574 2,805 2,633 2,186	-9,0604 8,9211 8,8351 8,8990 9,0769	+8,6991 ,5590 ,4707 ,5342 ,7104	+0,3462 ,4106 ,4479 ,4204 ,3896	+8,9882 8,7535 8,4854 8,7019 9,0093
1676 1677 1678 1679 1680	Argus Antl. Pneum. Argus	7 6.7 8 7	3 2 3 3	26 26 49,96 27 6,70 27 7,02 27 23,53	2,498 2,227 2,678 2,182 2,243	-8,9548 9,0612 8,8826 9,0795 9,0557	+8,5880 ,6944 ,5143 ,7112 ,6888	+0,3976 ,3477 ,4278 ,3388 ,3508	+8,8202 8,9890 8,6579 9,0140 8,9813
1681 1682 1683 1684 1685	Antl. Pneum. Argus Antl. Pneum. Argus	7 8 6 8.9 6.7	<i>SSSS</i>	27 25,51 27 30,03 28 7,20 28 15,57 28 25,04	2,758 2,209 2,660 2,546 2,162	8,8625 9,0710 8,8962 8,9395 9,0918	+8,4822 ,7006 ,5227 ,5653 ,7168	+0,4409 ,3442 ,4778 ,4059 ,3348	+8,5584 9,0023 8,6929 8,7898 9,0301
1686 1687 1688 1689 1690	Argus Antl. Pneum, Argus Antl. Pneum.	7 7 7	F 3 2 3 3	28 28 58,51 29 7,23 29 11,72 29 16,04	2,439 2,277 2,795 2,487 2,741	8,9859 9,0514 8,8429 8,9672 8,8629	+8,6092 ,6732 ,4637 ,5879 ,4830	+0,3872 ,3574 ,4464 ,3957 ,4379	4-8,8738 8,9744 8,8141 8,8412 8,5927
1691 1692 1693 1694 1696	Argus Antl. Pneum. Argus	7 7 7 7.8	3233	29 29 37,04 29 44,40 29 49,97 29 56,83	2,284 2,267 2,267 2,761 2,531	-9,0506 9,0577 9,0582 8,8564 8,9514	+8,6699 ,6764 ,6761 ,4782 ,5679	+0,3587 ,3554 ,3554 ,4411 ,4033	+8,9731 ,9838 ,9838 ,5678 ,8116
1696 1697 1698 1699 1700	Argus Antil. Pneum Argus	7.8 7 7 8	3 3 3	30 26,15 30 26,35 30 22,10 30 30 31,92	2,599 2,713 2,230 2,274 2,243	-8,9239 8,8762 9,0752 9,0588 9,0705	+8,5379 ,4902 ,6895 ,6725 ,6842	+0,4148 ,4334 ,3488 ,3568 ,3508	+8,7658 8,6339 9,0079 8,9846 9,000
1701 1702 1703 1704 1705	Argus	8 6.7 6.7 6.7	3 3 3 3	30 39,00 30 50,39 31 22,60 31 49,58 31 50,42	2,245 2,395 2,265 2,618 2,313	-9,0704 9,0113 9,0657 8,9197 9,0486	+8,6863 ,6232 ,6746 ,5261 ,6550	+0,3512 ,3971 ,3551 ,4180 ,3642	+9,0006 8,914 8,993 8,744 8,969
1706 1707 1708 1709 1710	Auth Pneum. Argus	7.8 5.6 7.8	83 73 4	32 1,70 32 24,11 32 32 40,53 32 41,40	2,707 2,122 2,259 2,263 2,260	-8,8825 9,1284 9,0729 9,0722 9,0730	+8,4879 ,7269 ,6766 ,6739 ,6747	+0,4325 ,3267 ,3539 ,8547 ,3541	+ 8,6504 9,070 9,003 9,002 9,002

	Declination	Annual		Logari	thms of		Differ		he Brisbane seconsion	Catalogue.
No.	(South.) Jan. 1. 1840.	Precession	a'	5'	G'	d'	No.		om   T.	Declin.
1666 1667 1668 1669 1670	60 32 15,27 67 13 44,53 62 64 10,85 57 43 21,67 43 47 39,42	-18,349 18,363 18,366 18,362 18,374	+9,7505 ,7581 ,7649 ,7566 ,7701	+9,9017 ,8867 ,8638 ,8892 ,8026	—1,2636 ,2637 ,2638 ,2639 ,2642	9,6045 ,6039 ,6036 ,6027 ,6013	3057 3061 3062 3063 3064	3,52 - 4,86 - 2,23 +69,19 - 2,80	- 2,04	- 0,80 +1,313 + 6,62 - 0,86 + 3,23
1671 1672 1673 1674 1675	57 50 34,90 42 48 18,12 26 31 29,53 39 24 49,48 59 2 32,28	18,376 18,381 18,398 18,400 18,404	+9,7551 ,7701 ,7520 ,7686 ,7497	+0,8901 ,7949 ,6131 ,7658 ,8964	—1,2643 ,2644 ,2648 , <del>2</del> 648 ,2649	-9,6010 ,6004 ,5984 ,5981 ,5975	3066 8066 3070 3071 3075	+57,92 $-2,69$ $-2,94$ $-2,01$ $-1,86$		- 2,58 + 1,62 + 2,32 - 0,14 - 4,04
1676 1677 1678 1679 1680	47 9 67 60 34,47 36 33 45,64 69 17 24,01 67 21 67,01	18,414 18,414 18,423 18,423 18,414	+9,7672 ,7628 ,7657 ,7182 ,7628	+9,8286 ,8909 ,7387 ,8979 ,8888	—1,2651 ,2651 ,2653 ,2653 ,2651	—9,6963 ,5963 ,5961 ,6961 ,6963	3077 3076 3079 3080 3078	-12,32 - 2,31 - 1,82 - 32,82		+ 0,30 + 1,33 0,00 + 4,48
1681 1682 1683 1684 1685	30 31 5,30 68 35 37,81 38 44 10,93 45 4 19,61 60 9 45,70	18,437 18,437 18,457 18,462 18,466	+9,7689 ,7489 ,7649 ,7649 ,7427	+9,6696 ,8951 ,7609 ,8146 ,9028	-1,2657 ,2657 ,2662 ,2653 ,2664	-9,5934 ,5934 ,5907 ,5901 ,5895	3081 3084 3085 3087 3089	+ 0,03 + 2,37 - 1,98 + 3,64	- 1 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	-32,38 + 0,71 + 5,16 - 2,34 - 1,73
1686 1687 1688 1689 1690	50 33 56 50 57,81 27 56 37,55 48 24 11,14 32 26 35,84	18,477 18,486 18,493 18,493 18,497	+9,7597 ,7482 ,7613 ,7604 ,7581	+9,8526 ,8879 ,6362 ,8391 ,6950	—1,2666 ,2668 ,2670 ,2670 ,2671	-9,5880 ,5808 ,5859 ,5859 ,5853	3090 3093 3094 3096 3097	1,64 - 2,00 - 2,12 - 1,52		+ 5,46 - 0,96 + 9,52 + 4,84
1691 1692 1693 1694 1695	56 46 57 21 57;24 57 23 48,25 30 56 5,29 46 25 34,48	18,502 18,507 18,511 18,518 18,520	+9,7474 ,7469 ,7469 ,7651 ,7604	+9,8878 ,8909 ,8911 ,6771 ,8259	—1,2672 ,2673 ,2674 ,2676 ,2676	-9,5847 ,5841 ,5834 ,5825 ,5822	3100 3105 3107 3106 3108	- 2,94 - 1,89 - 2,00 + 1,85		- 6,65 - 1,78 + 6,18 + 3,36
1696 1697 1698 1699 1700	42 41 38,36 34 53 29,26 58 43 59,08 57 24 58 21 39,09	18,535 18,635 18,633 18,638 18,638	+9,7612 ,8287 ,7404 ,7435 ,7419	+9,7976 ,7238 ,8980 ,8918 ,8964	,2680 ,2680 ,2679 ,2681 ,2681	-9,5801 ,5801 ,5804 ,5798 ,5798	3111 3110 3112 3116 3116			+ 3,02 - 4,59 + 3,59 + 3,36
1701 1702 1703 1704 1705	58 <b>20</b> 17,64 53 1 30,32 57 54 9,86 41 55 17,46 56 25 32,92	18,542 18,549 18,567 18,682 18,582	+9,7411 ,7513 ,7396 ,7589 ,7419	+9,8964 ,8690 ,8949 ,7923 ,8880	_1,2682 ,2683 ,2687 ,2691 ,2691	-9,5792 ,5782 ,5758 ,5756 ,5736	3117 3119 3121 3122 3123	- 1,39 - 1,52 - 2,61 - 2,62 - 1,87	- <del>3,01</del>	+ 7,27 + 4,30 + 3,21 + 0,72 - 3,11
1706 1707 1708 1709 1710	35 50 47,91 62 13 25,78 58 26 58 21 <b>2</b> ,13 58 25 47,32	18,588 18,599 18,603 18,610 18,611	+9,7566 ,7259 ,7356 ,7356 ,7348	+9,7351 ,9145 ,8982 ,8980 ,8983	1,2692 ,2695 ,2696 ,2697 ,2697	9,5726 ,6711 ,5704 ,5695 ,5695	3124 3125 3126 3127 3128	$ \begin{array}{c c} -2,44 \\ -2,12 \\ -1,77 \\ -1,91 \end{array} $	3,82	- 3,68 - 2,10 + 6,76 + 6,00

No.	Names.	3.0	No.	Right Ascen.	Annual		Logari	thms of	
110	TARIHOS.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	а	b	c	
1711 1712 1713 1714 1715	Argus	8.9 7 5.6 7.8 7.8	3 3 3 3	H. M. S. 10 32 52,96 32 64,36 32 57,56 33 3,37 33 24,10	e. + 2,261 2,276 2,367 2,368 2,450	9,0733 9,0679 9,0312 9,0312 8,9979	+8,6743 ,6684 ,6314 ,6311 ,5959	+0,3543 ,3672 ,3742 ,3744 ,3892	+9,0039 8,9964 8,9435 8,9435 8,8914
1716 1717 1718 1719 1720	Argus Antl. Pasum. Argus Antl. Pasum.	7.8 8.9 7 7	323 13	33 24,86 33 33,41 33 34,11 34 34 12,18	2,662 2,210 2,725 2,246 2,728		+8,5612 ,6930 ,4755 ,6791 ,4726	+0,4069 ,3444 ,4354 ,3512 ,4358	+8,8127 9,0341 8,6365 9,0198 8,6367
1721 1722 1723 1724 1725	Argus Antl. Pneum. Argus Antl. Pneum.	9.10 7 7.8 7.8	23   26	34 28,95 34 30,96 34 36 8,27 35 11,60	2,268 2,317 2,677 2,260 2,270	-9,0777 9,0586 8,9021 9,0838 9,0800	+8,6694 ,6496 ,4919 ,6718 ,6680	+0,3556 ,3640 ,4276 ,3541 ,3562	+9,0094 8,9829 8,6999 9,0177 9,0125
1726 1727 1728 1729 1730	Argus Anti. Pneum. Argus Anti. Pneum.	7.8 7 7.8 7.8	33333	35 29,59 34 46,97 35 50,97 36 21,62 36 23,19	2,663 2,589 2,781 2,361 2,693	8,9553 8,9443 8,8608 9,0476 8,8995	+8,5414 ,5288 ,4146 ,6288 ,4802	+0,4087 ,4131 ,4442 ,3731 ,4802	+ 8,8158 8,7935 8,5720 8,9665 8,6912
1731 1732 1733 1734 1736	Argus Antl .Pneum. Argus	8 6.7  8.9 7.8	2 3 1 - 3	36 30,21 36 30,52 36 36 58,94 37 2,72	2,293 2,298 2,237 2,724 2,243	-9,0762 9,0752 9,0753 8,8870 9,0983	+8,6566 ,6556 ,6549 ,4647 ,6760	+0,3604 ,3610 ,3612 ,4352 ,3508	+9,0069 9,0056 9,0056 8,6804 9,0367
1736 1737 1738 1739 1740	Argus Antl. Pneum. Argus	7.8 7 8 5.6 9	3 4 2 2 3	37 9,33 37 20,43 37 24,36 37 27,68 37 43,33	2,239 2,725 2,709 2,261 2,400	-9,1006 8,8879 8,8947 9,0929 9,0364	+8,6776 ,4633 ,4701 ,6683 ,6100	+0,3600 ,4364 ,4328 ,5543 ,3802	+9,0397 8,6583 8,6775 8,9294 8,9496
1741 1742 1743 1744 1745	E Argus	7.8 8 8.9 7.8	3 3 3 3	37 45,06 37 47,50 37 58,95 38 18,82 38 46,20	2,270 2,397 2,298 2,247 2,578	9,0874 9,0803 9,0808 9,0863 8,9596	+8,6609 ,6534 ,6528 ,6567 ,6260	+0,3577 ,3585 ,3613 ,3693 ,4113	+9,0218 9,0121 9,0128 9,0202 8,8212
1746 1747 1748 1749 1760	Argus Anti. Pneum. Argus	7.8 6.7 8.9 8	3 3 3 3	39 1,72 39 7,92 39 30,79 39 37,66 39 52,23	2,410 2,862 2,317 2,316 2,621	-9,0376 8,8402 9,0798 9,0307 8,9911	+8,6033 ,4036 ,6428 ,6430 ,5517	+0,3820 ,4551 ,3649 ,3647 ,4014	+8,9508 8,4699 9,0110 9,0123 8,8768
1751 1752 1753 1754 1755	Argus	8.9 7 8.9 6 7.8	3 3 3 3 3	39 59,40 40 9,40 40 11,64 40 31,62 40 54,54	2,322 2,286 2,212 2,398 2,386	9,07 <b>8</b> 8 9,0963 9,1133 9,0490 9,055 <b>7</b>	+8,6399 ,6648 ,6728 ,6062 ,6105	+0,3659 ,3591 ,3506 ,3798 ,3777	+9,0096 9,0319 9,0557 8,9673 8,3768

	Declination.	Angual	<u> </u>	Logari	thms of		Diffe	rence from the Right A	scension	Catalogue.
No.	(South.) Jan. 1. 1840.	Annual Precession	a*	b'	c' ·	d'	No.		m	Declin.
1711 1712 1713 1714 1715	68 26 11,12 67 59 5,00 51 46 21,23 51 46 37,45 51 27 4,37	18,616 18,617 18,619 18,621 18,632	.+9,7438 ,7353 ,7419 ,7419 ,7466	+9,8796 ,8335 ,8303 ,8304 ,8618	-1,2697 ,2699 ,2699 ,2700 ,2702	-9,5639 ,5685 ,5632 ,5679 ,5663	3134 3133 3135 3135 3133 3140	5. - 0,69 - 2,04 - 3,04 - 1,75 - 1,91	- 2,32 - 3,58	- 0,58 + 3,74 - 7,29 - 8,35 - 0,50
1716 1717 1718 1719 1720	46 19 36,83 60 9 14,33 34 54 34,22 59 18 34 53 49,94	18,632 18,636 18,633 18,655 18,657	+9,7528 ,7283 ,7528 ,7283 ,7520	+9,8278 ,9058 ,7233 ,9334 ,7266	-1,2702 ,2703 ,2704 ,2703 ,2708	9,6663 ,5657 ,5654 ,5628 ,5625	3139 3143 3141 3150 3148	$ \begin{array}{c} -2,41 \\ -3,99 \\ -3,10 \\ -3,14 \end{array} $		+6,63 $-3,21$ $-8,31$ $-4,43$
1721 1722 1723 1724 1725	58 42 30,37 57 6 1,47 38 51 59 8 16,31 58 50 26,22	18,668 18,672 13,678 18,689 18,689	+9,7292 ,7332 ,7528 ,7259 ,7237	+9,9009 ,8935 ,7672 ,9035 ,9021	-1,2711 ,2712 ,2713 ,2713 ,2716	9,5608 ,5602 ,5592 ,5576 ,5576	3152 3151 3155 3159 3162	$ \begin{array}{r} -1,49 \\ -3,01 \\ -0,74 \\ -1,84 \end{array} $	2,19	$ \begin{array}{c c} + 9,62 \\ + 0,31 \\ \hline - 0,79 \\ + 4,71 \end{array} $
1726 1727 1728 1729 1730		19,700 18,708 19,712 18,727 18,729	+9,7442 ,7482 ,7451 ,7309 ,7489	+9,8279 ,8193 ,6314 ,8894 ,7623	-1,2718 ,2720 ,2721 ,2725 ,2725	-9,5560 ,5547 ,5540 ,5517 ,5514	3163 3168 3169 3173 3173	- 2,11 -60,95 - 1,67 - 2,74 - 1,48		+ 4,62 - 1,12 - 4,23 - 0,09 + 0,79
1731 1732 1733 1734 1735	58 22 41,00 58 22 35 59 19,41	18,731 18,731 18,735 18,745 18,745	+9,7243 ,7243 ,7235 ,7474 ,7185	+9,9013 ,9003 ,9010 ,7401 ,9093	-1,2725 ,2726 ,2726 ,2729 ,2729	-9,5610 ,5510 ,6504 ,5487 ,6487	317,4 3175 3177 3179 3180	3,65		$ \begin{array}{r}  + 4,35 \\  - 2,28 \\  - 8,10 \end{array} $
1736 1737 1738 1739 1740	60 19 54,50 36 5 26,92 37 18 14,20 59 43 45,99	18,750 18,758 18,758 18,758 18,768	+9,7177 ,7466 ,7466 ,7185 ,7292	+9,9101 ,7117 ,7541 ,9077 ,8847	-1,2730 ,27)2 ,2732 ,2732 ,2734	-9,5487 ,5467 ,5467 ,5466 ,5450	3181 3182 3183 3185 3186	-2,64 $-3,84$	- 2,86	- 0,15 - 3,81 - 8,36 - 1,59 - 8,49
1741 1743 1743 1744 1744	2 58 42 27,03 3 58 44 12,40 4 59 9 12,82	18,770 18,776 18,784	+9,7177 ,7202 ,7193 ,7163 ,7412	,9031	-1,2734 ,2735 ,2735 ,2735 ,2742	-9,5450: ,5447 ,5436 ,5423 ,5396	3187 3188 3193 3193 3197	$\begin{array}{c c} -3,30 \\ -3,45 \\ -5,54 \end{array}$	- 4,06 	+ 1,28 + 7,00 + 0,82 + 2,04 + 5,39
1740 1740 1740 1740 1740 175	7   . 25   12   35   37 8       58   33   57   78 9       58   38   47   94	18,820 18,822 18,827	+9,7259 ,7308 ,7152 ,7152 ,7324	,6024 ,9040 ,9044	-1,2743 ,2746 ,2747 ,2748 ,2750	,5359 ,5351	3198 3200 3204 3204 3206	$\begin{array}{c c} 0 & -2,19 \\ 2 & -3,33 \\ 4 & -2,03 \end{array}$		$ \begin{array}{c c} -4,60 \\ +1,95 \\ +5,15 \\ -4,28 \end{array} $
175 176 176 176 176	2 59 45 42,01 3 61 5 58,13 4 55 54 54,52	19,840 18,840 18,852	,7101 ,7067 ,7193	9097 9155 8917	,2751 ,2751 ,275	,53 27 ,53 27	320 320 321	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		3,88 - 1,49 + 10,78 - 1,76 - 4,66

No.	Tons		No.	Right Ascen.	Annual	•:	Logarit	hms of	<u> </u>
AY U,	Namęs.	Mag.	Obs.	Jan. 1, 1840.	Precesn,	а	b	c	d
1756 1757 1758 1759 1760	Argus Antl. Pneum. Argus	7 7 9 7.8 7	4 3 2 3 3	H. M. S. 10 41 13,70 41 22,63 41 28,35 41 30,46 41 45,73	.8 + 2,385 2,838 2,299 2,321 2,590	-9,0577 8,8485 9,0964 9,0868 8,9639	+8,6104 ,4004 ,6476 ,6380 ,5134	+0,3775 ,4530 ,3615 ,3657 ,4133	+8,9795 8,5070 9,0331 9,0201 8,8275
1761 1762 1763 1764 1765	Argus Anti. Pneum. Argus	6.7 7.8 7 7.8 7.8	33333	41 50,93 42 5,20 42 13,29 42 16,41 42 24,16	2,323 2,717 2,389 2,675 2,319	-9,0877 8,9041 9,0607 8,9244 9,0919	+8,6368 ,4512 ,6074 ,4708 ,6378	+0,3660 ,4341 ,3782 ,4273 ,3653	+9,0212 8,6968 8,9835 8,7461 9,0267
1766 1767 1768 1769 1770	Argus	8.9 7.8 7.8 6.7 8.9	33333	42 37,33 43 5,31 44 40,00 44 \$5,96 45 0,83	2,343 2,351 2,348 2,586 2,357		+8,6270 ,6225 ,6220 ,6079 ,6174	+0,3698 ,3712 ,3707 ,4126 ,3724	+9,0137 9,0117 9,0236 8,8509 9,0201
1771 1772 1773 1774 1775	Argue	6.7 7 8.9 7.8	က မြတ္သက္	45 16,91 45 45 20,74 45 29,39 45 30,02	2,425 2,475 2,474 2,636 2,397	9,0576 9,0345 9,0347 8,9542 9,0716	+8,5869 ,5619 ,5621 ,4808 ,5986	+0,3847 ,3936 ,3934 ,4209 ,3797	+8,9783 8,9441 8,9444 8,8067 8,9981
1776 1777 1778 1779 1780	Antl. Pneum. Argus Antl. Pneum. Hydræ.	6.7 7.8 6 7.8 7.8	4 3 3 3 3	45 35,70 45 57,14 45 58,96 46 16,54 46 19,23	2,774 2,404 2,430 2,810 2,863	-8,8856 9,0699 9,0581 8,8704 8,8472	+8,4114 ,5940 ,5818 ,3920 ,3684	+0,4431 ,3809 ,3856 ,4487 ,4568	+8,6406 8,9956 8,9788 8,5885 8,4878
1781 1782 1783 1784 1785	Antl. Pneum.	6.7 7.8 7.8	3 2	46 33,76 46 37,74 46 49,50 46 46	2,767 2,422 2,560 2,392 2,372	-8,8914 9,0653 8,9981 9,0781 9,0902	+8,4112 ,5847 ,5167 ,5959 ,6071	+0,4420 ,3842 ,4082 ,3791 ,3751	+8,6567 8,9858 8,8856 9,0069 9,0234
1786 1787 1788 1789 1790	Anti Pnoun Argus	7 8.9 7 7 6.7	3 3 3 3	47 14,69 47 52,76 47 56,22 47 57,68 48 13,93	2,744 2,317 2,483 2,506 2,327	8,9048 9,1196 9,0414 9,0302 9,1167	+8,4204 ,6309 ,5527 ,5411 ,6264	+0,4384 ,3649 ,3950 ,3990 ,3668	+8,6935 9,0623 8,9537 8,9567 9,0586
1791 1792 1793 1794 1795	Centauri Antl: Pneum, Argus	7.8 6.7 8 7.8 6.7	3 4 2 3 3	48 13,93 48 18,23 48 27,39 48 39,64 48 65,06	2,696 2,822 2,547 2,621 2,372	-8,9327 8,8692 9,0115 9,0267 9,0999	+8,4418 ,3779 ,6194 ,5323 ,6047	+0,4307 ,4506 ,4060 ,4016 ,3751	+8,7598 8,5806 8,9071 8,9294 9,0361
1796 1797 1798 1799 1800	Argus Antl. Pneum. Argus	7 7 7.8 7.8 8	3 3 2 3 3	49 8,55 49 42,30 49 47,54 50 5,40 50 16,47	2,629 2,443 2,381 2,766 2,351	9,0697 9,0697 9,0995 8,9012 9,1164	+8,4744 ,5693 ,5987 ,3982 ,6125	+0,4198 ,3879 ,3768 ,4418 ,3712	+8,8373 -8,9943 -9,0355 -8,6809 -9,0527

No.	Declination (South.)	Annual		Logario	lims of		Differ		he Brisbane accension	Catalogue.
	Jan. 1, 1840.	Precession	a'	b***	c'	d'	No.		om	Declin.
1756 1757 1758 1759 1760	56 37 25,78 27 4 25,42 59 46 30,55 59 1 52,36 46 54 23,50	-18,874 18,878 18,882 18,882 18,882 18,890	+9,7160 ,7316 ,7058 ,7070 ,7324	+9,8958 ,6326 ,9108 ,9074 ,8380	-1,2759 ,2759 ,2760 ,2760 ,2762	-9,5267 ,5260 ,5253 ,5253 ,5238	3220 3221 3224 3225 3227	3. - 2,94 - 2,36 - 0,86 - 1,34 - 2,55	5.	- 1,27 - 1,17 - 2,42 - 0,73 + 3,15
1761 1762 1763 1764 1765	59 4 28,41 38 19 32,47 56 49 41,49 41 31 24,51 59 22 44,94	18,892 18,903 18,903 18,905 18,907	+9,7067 ,7372 ,7118 ,7364 ,7041	+9,9079 ,7673 ,8975 ,7963 ,9096	1,2769 ,2765 ,2765 ,2766 ,2766	-9,5235 ,5217 ,5213 ,5210 ,5206	3229 3231 3233 3234 3236	$ \begin{array}{r} -1,82 \\ -2,22 \\ -0,81 \\ -2,88 \end{array} $		+ 2,77 + 7,03 - 0,03 - 0,54 + 1,31
1766 1767 1768 1769 1770	58 36 4,06 58 28 37,73 59 6 33,52 48 18 24,37 58 53 43,12	18,913 18,926 18,972 18,979 18,981	+9,7067 ,7060 ,6990 ,7236 ,6981	+9,9062 ,9059 ,9099 ,8497 ,9091	1,2768 ,2771 ,2781 ,2783 ,2783	9,5195 ,5167 ,5082 ,5067 ,5063		- 1,90 - 1,81 - 2,25 - 2,80 - 2,99		$\begin{array}{r} -0.04 \\ +1.29 \\ +0.99 \\ +2.15 \\ +0.12 \end{array}$
1771 1772 1773 1774 1775	1 56 25 25,69 54 17 54 17 23,62 45 22 8,00 57 33 59,58	18,988 18,992 18,993 18,996 18,994	+9,7041 ,7093 ,7093 ,7259 ,6998	+9,8973 ,8863 ,8863 ,8292 ,9032	-1,2785; ,2786 ,2786 ,2787 ,2786	9,5049 ,5041 ,5041 ,5034 ,5037	3253 3254 3255 3256 3257	$ \begin{array}{r} -2,09 \\ -1,40 \\ -2,90 \\ -4,84 \end{array} $	<u>- 2,51</u>	+ 0,93 + 1,77 + 1,95 - 0,83
1776 1777 1778 1779 1780	34 38 24,77 57 24 10,87 56 23 28,34 31 28 34,12 25 53 47,12	. 19,000 19,007 19,009 19,018 19,020	+9,7308 ,6998 ,7024 ,7283 ,7296	+9,7318 · ,9027 ,8977 ,6953 ,6178	-1,2787 ,2789 ,2790 ,3792 ,2792	-9,5026 ,5011 ,5007 ,4988 ,4984	3263	$ \begin{array}{r}  -0.30 \\  -3.81 \\  -1.16 \\  -2.65 \\  -2.35 \end{array} $		- 3,07 - 2,92 + 0,42 - 4,75 - 3,64
1781 1782 1783 1784 1785	35 36 25,83 56 58 21,34 50 38 56,92 58 1 59 0	19,026 19,027 19,031 19,035 19,038	+9,7292 ,6981 ,7143 ,6965 ,6902	+9,7428 ,9010 ,8650 ,9064 ,9109	—1,2793 ,2794 ,2795 ,2795 ,2796	-9,4973 ,4969 ,4961 ,4954 ,4946	3268 3270 3271 3272 3275	- 2,79 - 2,40 - 3,26		- 3,04 - 2,91 -10,0,31
1786 1787 1788 1789 1790	37 54 11,76 61 11 26,21 54 46 6,02 53 42 28,15 60 58 28,28	19,044 19,062 19,062 19,064 19,069	+9,7267 ,6812 ,7007 ,7041 ,6803	+9,7665 ,9210 ,8905 ,8848 ,9202	1,2797 ,2802 ,2802 ,2802 ,2802	-9,4935 ,4896 ,4896 ,4892 ,4880	3278 3282 3281 3283 3286	- 3,03 - 2,34 - 3,92 - 1,37 - 2,79		+ 0,01 + 6,25 - 5,76 + 2,94 + 4,31
1791 1792 1793 1794 1795	42 10 8,33 30 56 2,31 51 48 3,39 53 13 36,14 59 40 8,54	19,071 19,073 19,076 19,082 19,089	+9,7218 ,7248 ,7067 ,7033 ,6830	-+9,8056 ,6899 ,8741 ,8825 ,9151	-1,2804 ,2804 ,2805 ,2806 ,2808	—9,4876 ,4872 ,4865 ,4858 ,4837	3284 3285 3287 3289 3291	- 1,95 - 3,08 - 2,90 - 3,08 - 2,27		+ 0,16 - 3,08 + 1,58 + 2,12 - 2,67
1796 1797 1798 1799 1800	47 14 16,68 57 11 53,52 59 35 58,56 36 59 17,98 60 51 18,04	19,096 19,110 19,112 19,121 19,124	+9,7143 ,6884 ,6803 ,7210 ,6739	+9,8450 ,9040 ,9153 ,7592 ,9210	1,2809 ,2813 ,2813 ,2815 ,2816	9,4821 ,4789 ,4785 ,4765 ,4767	3292 3294 3296 3297 3299	$\begin{array}{r} -2,12 \\ -2,64 \\ -2,29 \\ -2,74 \\ -2,67 \end{array}$		0,51 4 3,17 +- 1,96 +- 6,05 +- 2,38

No.	Names.	Mag.	No.	Right Ascen.	Annual		Logari	thms of	
	riames.	mrag.	Obs.	Jan. 1, 1840.	Precesn.	а	<u> </u>		
1801 1802 1803 1804 1805	Centauri. Antl. Pneum. Argus	7.8 7.8 7.8 7 7.8	3 3 3 3 3	II. M. S. 10 50 28,96 50 41,24 61 11,79 51 18,69 61 20,46	2,671 2,720 2,767 2,416 2,607	8,9546 8,9274 8,9039 9,0911 9,0451	+8,4489 ,4209 ,3933 ,5800 ,5340	+ 0,4267 ,4346 ,4420 ,3831 ,3991	+8,8045 8,7463 8,6870 9,0237 8,9582
1806 1807 1808 1809 1810	Antl. Pneum. Argus Antl. Pneum. Argus	8 7.8 6.7 7 8	2 3 3 3 3 3 3	51 34,10 61 67,05 52 13,49 52 17,11 62 32,18	2,803 2,464 2,558 2,803 2,441	-8,8860 9,0704 9,0224 8,8878 9,0847	+8,3732 ,6549 ,5061 ,3700 ,5655	+ 0,4476 ,3916 ,4079 ,4476	+8,6341 8,9948 8,9232 8,6389 9,0147
1811 1812 1813 1814 1815	Centauri. Argus	6.7 7. 7.8	3 3 3 3 3	52 44,07 52 49,14 52 63,32 62 63 11,10	2,709 2,387 2,560 2,563 2,595	8,9407 9,1125 9,0241 9,0228 9,0062	+8,4202 ,5915 ,5022 ,5009 ,4825	+0,4328 ,3778 ,4082 ,4087 ,4141	+8,7744 9,0521 8,9266 8,9235 8,8966
1816 1817 1818 1819 1820	Argus Antl. Pneum. Argus	7.8 7 7.8 7 8.9	2 4 2 3 3	53 17,01 53 31,78 53 35,22 53 42,11 53 47,19	2,359 2,752 2,696 2,576 2,456	9,1287 8,9190 9,0077 9,0190 9,0832	+8,6045 ,3929 ,4812 ,4915 ,5557	+0,3727 ,4396 ,4143 ,4109 ,3902	+9,0733 8,7239 8,8989 8,9172 9,0123
1821 1822 1823 1824 1825	Argus  Centauri, Argus  Hydræ.	7.8 8 8 7 7	9 3 3 3 3	53 51,97 64 34,45 54 51,57 55 5,46 55 34,69	2,596 2,513 2,736 2,417 2,882	-9,0092 9,0576 8,9329 9,1102 8,8555	+8,4803 ,5240 ,3970 ,5729 ,3145	+0,4143 ,4002 ,4371 ,3833 ,4597	+8,9012 8,9760 8,7556 9,0487 8,5078
1826 1827 1828 1829 1830	Antl. Pneum. Argus Antl. Pneum. Argus	7.8 9 7 7.8 7	3 3 3 3	55 39,54 55 50,47 56 17,80 56 31,30 56 32,99	2,845 2,550 2,834 2,435 2,434	8,8742 9,0440 8,8815 9,1078 9,1095	+8,3327 ,5015 ,3357 ,5620 ,5622	+0,4541 ,4065 ,4524 ,3865 ,3863	+8,5877 8,9553 8,6131 9,0453 9,0474
1831 1832 1833 1834 1835	Argus Antl. Pneum. Argus Centauri.	7.8 7.8 8 7	2 3 3 3	56 56 42,74 56 46,22 56 46,97 57 2,24	2,410 2,687 2,805 2,632 2,743	9,1215 9,0039 8,8986 9,0010 8,9352	+8,5742 ,4551 ,3494 ,4518 ,3855	4-0,3820 ,4196 ,4479 ,4203 ,4382	+9,0634 8,8914 8,6666 8,8865 8,7594
1836 1837 1838 1839 1840	Argus  T Centauri.  Antl. Pneum.	7 7.8 6 6 6	3 1 3 3 8	57 6,40 57 11,92 57 15,40 57 20,75 57 21,83	2,582 2,492 2,511 2,684 2,817	9,0317 9,0824 9,0728 8,9725 8,8940	+8,4800 ,5303 ,5201 ,4194 ,3404	+0,4120 ,3965 ,3998 ,4288 ,4498	+8,9361 9,0106 8,9969 8,8356 8,6523
1841 1842 1843 1844 1846	Argus Antl. Phoum. Centauri. Hydre.	7,8 7 7 7 7	3 2 3 3 2	57 29,69 57 32,64 58 28,44 58 31,92 58 56,55	2,604 2,864 2,771 2,695 2,883	-9,0210 8,8684 8,9308 8,9712 8,8619	+8,4669 ,3134 ,3689 ,4088 ,2964	+0,4156 ,4570 ,4411 ,4306 ,4598	+8,9192 8,5621 8,7488 8,8325 8,5319

<u></u>	Declination.			Logarit	hms of	; ;	Diffe	rence from the		Catalogue.
No.	(South.) Jan, 1. 1840.	Annual Precession	a'	<i>b'</i>	c'	d'	No.	fro M.C.		Declin.
1801 1802 1803 1804 1804	45 1 20,90 41 11 2,36 37 20 49,27 58 52 35,56 54 55 45,03	-19,131 19,134 19,150 19,152 19,152	+9,7135 ,7177 ,7193 ,6776	+9,8297 ,7987 ,7634 ,9829 ,8934	-1,2817 ,2818 ,2822 ,2822 ,2822	—9,4741 ,4733 ,4696 ,4692 ,4692	3300 3302 3305 3307 3308	$ \begin{array}{r}                                     $	- <del>2,90</del>	- 4,41 + 8,51 + 0,91 + 2,85 - 3,38
1800 1807 1808 1809 1810	34 1 10,47 57 8 9,35 52 40 59,21 34 17 10,31 58 18 42,88	19,158 19,169 19,176 19,177 19,182	+9,7202 ,6812 ,6937 ,7168 ,6758	+9,7286 ,9051 ,8815 ,7320 ,9110	—1,2824 ,2826 ,2827 ,2828 ,2829	-9,4676 ,4651 ,4634 ,4630 ,4618	3309 3316 3317 3318 3319	- 1,66  - 2,80  - 1,94  - 1,23  - 2,66		+ 2,94 - 0,58 + 4,27 + 2,27 - 2,69
1811 1812 1813 1814 1815	42 56 58,69 60 27 51,69 52 49 51,95 52 41 50 57 37,01	19,187 19,189 19,192 19,192 19,199	+9,7110 ,6674 ,6920 ,6920 ,6955	+9,8147 ,9207 ,8827 ,8819 ,8718	-1,2830 ,2830 ,2831 ,2831 ,2833	-9,4605 ,4601 ,4593 ,4593 ,4576	3321 3324 3325 3326 3329	$ \begin{array}{r} -3,19 \\ -2,25 \\ -2,17 \\ -2,51 \end{array} $		+ 4,77 + 1,20 + 1,89 + 3,75
1816 1817 1818 1819 1820	61 37 34,65 39 38 27,23 51 5 20,39 52 15 16,43 58 7 29,32	19,201 19,207 19,209 19,212 19,212	+9,6609 ,7126 ,6937 ,6911 ,6730	+9,9259 ,7864 ,8728 ,8799 ,9108	-1,2833 ,2835 ,2835 ,2836 ,2836	-9,4572 ,4555 ,4550 ,4542 ,4542	3330 3331 3333 3334 3336	- 2,90 - 2,72 - 2,80 - 2,08 - 4,67	- <del>3,43</del>	+ 3,72 - 1,97 + 3,92 + 1,62 - 3,27
1821 1822 1823 1824 1825	51 12 59,84 55 54 29,61 41 38 16,79 60 11 25,97 26 39 26,03	19,217 19,234 19,242 19,247 19,260	+9,6928 ,6776 ,7076 ,6599 ,7093	+9,8738 ,9003 ,8050 ,9209 ,6350	1,2837 ,2841 ,2842 ,2844 ,2846	-9,4529 ,4486 ,4465 ,4451 ,4417	3336 3341 3343 3345 3348	- 1,86 - 2,41 - 0,82 - 1,62 - 2,46		+ 4,47 - 0,54 + 5,68 + 3,41 - 2,28
1826 1827 1828 1829 1830	31 5 57,80 54 35 9,74 32 34 54,44 59 57 55,01 60 3 3,30	19,262 19,265 19,276 19,276 19,281	+9,7110 ,0776 ,7093 ,6671 ,6551	+9,6963 ,8942 ,7147 ,9205 ,9212	-1,2847 ,2848 ,2850 ,2850 ,2851	-9,4412 ,4403 ,4372 ,4372 ,4359	3350 3352 3354 3356 3359	$ \begin{array}{r} -2,02 \\ -1,35 \\ -2,32 \\ -13,63 \\ -2,29 \end{array} $		- 0,04 - 2,99 - 0,64 - 3,90 + 0,09
1831 1832 1833 1834 1835	50 29 34,50 35 51 40,20 50 10 11,25	19,281 19,285 19,287 19,287 19,289	+9,6522 ,6866 ,7084 ,6875 ,7024	+9,9250 ,8708 ,7513 ,8689 ,8076	—1,2851 ,2852 ,2853 ,2853 ,2853	-9,4359 ,4346 ,4341 ,4341 ,4337	3357 3361 3362 3363 3365	2,19 1,80 1,87	3,25	+ 0,95 + 0,76 - 2,06 + 7,50
1836 1837 1838 1839 1840	57 54 14,31 59 5 38,35 46 49 6,00	19,295 19,297 19,298 19,300 19,301	+9,6776 ,6618 ,6656 ,6937 ,7076	+9,8879 ,9117 ,9077 ,8467 ,7419	—1,2854 ,2855 ,2855 ,2855 ,2856	-9,4319 ,4314 ,4310 ,4305 ,4301	3368 3369 3370 3371 3372	- 2,09 - 3,60 - 2,34 - 4,05 - 2,65	- 3,19 - 3,42	$   \begin{array}{r}     + 0,99 \\     +14,10 \\     - 2,42 \\     + 2,97 \\     - 4,10   \end{array} $
1841 1842 1843 1844 1845	41 2 40,60 46 34 42,59	19,303 19,306 19,328 19,329 19,338	+9,6803 ,7076 ,6990 ,6902 ,7080	+9,8819 ,6774 ,8018 ,8456 ,6544	-1,2856 ,2857 ,2862 ,2862 ,2864	-9,4296 ,4287 ,4223 ,4219 ,4190	3373 3374 3386 3387 3389	- 6,29 - 2,72 - 2,01 - 3,56 - 3,02	$-\frac{3,71}{-\frac{4,18}{4,18}}$	+ 3,64 + 0,54 + 6,98 + 4,90 + 0,14

Ne.	Names.	Mag.	No.	Right Ascen.	Annunl		Logarit	hms of	
716.	tagines.	mag.	Obs.	Jan. 1, 1840.	Procesn.	a	b	C	d
1846 1847 1848 1849 1850	Antl. Pneum. Centauri Argus	7 7 8 9.10 7	3 3 3 3	H. M. S. 10 59 12,00 59 21,11 59 27,64 59 39,50 59 43,11	s. +2,869 2,651 2,616 2,622 2,517	-8,8698 9,0016 9,0236 9,0205 9,0826	+8,3024 ,4336 ,4542 ,4501 ,5116	+0,4577 ,4234 ,4176 ,4186 ,4009	+8,5650 8,8866 8,9226 8,9178 9,0102
1851 1852 1853 1854 1855	Argus Antl. Pneum Centauri Antl. Pneum	6 7 7	3   3 3	59 11 0 1,76 0 0 20,92 0 33,41	2,617 2,430 2,875 2,690 2,878	-9,0236 9,1314 8,8687 8,9819 8,8680	-+ 8,4532 ,5585 ,2927 ,4059 ,2904	+0,4176 ,8856 ,4586 ,4297 ,4591	+8,9227 9,0767 8,5688 8,8516 8,5553
1856 1857 1858 1859 1860	Hydrae Argus  Z <sup>2</sup> x	7 7 6 7.8 6.7	2 3 2 3 3	0 57,24 1 8,34 1 46,85 1 48,48 1 55,99	2,881 2,641 2,529 2,568 2,462	-8,8672 9,0160 9,0872 9,0649 9;1259	+8,2866 ,4343 ,5004 ,4776 ,5380	+0,4595 ,4226 ,4020 ,4096 ,3913	+8,5517 8,9097 9,0163 8,9847 9,0682
1861 1862 1863 1864 1865	Argus Hydræ Argus Antl. Pneum. Argus	8 6 7 7 8	သ သ တ သ လ	2 9,87 2 16,16 2 39,27 2 46,19 2 50,76	2,475 2,884 2,616 2,835 2,542	-9,1206 8,8680 9,0308 6,8983 9,0861	+8,5306 ,2770 ,4462 ,3036 ,4909	+0,8936 ,4600 ,4176 ,4525 ,4052	+9,0612 8,5529 8,9471 8,6595 9,0146
1866 1867 1868 1869 1870	Centauri Antl. Pneum. Argus Hydræ	7.8 8 7 6.7	3 3 3 5	3 24,70 3 26,16 3 54,90 4 1,76 4 10,42	2,696 2,837 2,519 2,560 2,910	-8,9921 8,8993 9,1060 9,0820 8,8570	+8,3921 ,2998 ,5023 ,4777 ,2543	-1-0,4307 ,4529 ,4012 ,4082 ,4639	+8,8680 8,6620 9,0416 9,0086 8,4983
1871 1872 1873 1874 1875	Centanri Argus Antl. Pneum. Argus Hydræ	8 8 7 7	အ အေ ၂ အ	4 10,85 4 16,09 4 33,18 4 4 34,66	2,695 2,631 2,872 2,520 2,892	-8,9970 9,0389 8,8809 9,1058 8,8691	1 + 8,3905 ,4319 ,2717 ,5015 ,2594	+0,4806 ,4201 ,4582 ,4014 ,4612	+8,8769 8,9463 8,6002 9,0413 8,5537
1876 1877 1878 1879 1880	Centauri Argus Centauri Hydræ	6.7	\$ 5   3   3	4 48,76 5 9,10 5 5 16,86 5 24,18	2,746 2,571 2,530 2,715 2,917	8,9651 9,0822 9,1070 8,9882 8,8565	+8,3537 ,4681 ,4929 ,3730 ,2402	+0,4387 ,4101 ,4031 ,4338 ,4649	+8,8178 9,0086 9,0427 8,8611 8,4923
1881 1882 1883 1884 1886	Centauri Hydrae Argus Centauri	6.7	3 - 2 4	5 39,13 5 5 5 45,27 6 1,59	2,710 2,895 2,516 2,539 2,707	8,9939 8,8696 9,1191 9,1058 8,9974	1 +8,3753 ,2505 ,5006 ,4867 ,3706	+0,4330 ,4616 ,4007 ,4047 ,4325	+8,8710 8,5543 9,0587 9,0410 8,8770
1886 1887 1888 1889 1890	Argus Centauri Argus Centauri	7.8 6.7 7	3 3 3 3 3	6 29,30 6 34,61 6 36,90 6 39,60 6 45,49	2,668 2,689 2,561 2,671 2,731	9,0264 9,0128 9,0975 9,0229 8,9845	+8,4012 ,3864 ,4712 ,3960 ,3570	+0,4262 ,4296 ,4084 ,4265 ,4863	+8,9252 8,9030 9,0296 8,9196 8,8539

i -	Declination	Annual		Logarit	hms of		Differ	ence from the Right As		Catalogue.
No.	(South.) Jan. 1, 1840.	Precession	a'	<b>b</b> '	c'	ď'	No.	M, C.	m	Deolin.
1846 1847 1848 1849 1850	50 5 40,90 52 24 26,98 52 5 11,73	" 19,345 19,346 19,350 19,354 19,355	+9,7060 ,6794 ,6730 ,6730 ,6642	+9,6799 ,8697 ,8838 ,8821 ,9125	—1,2866 ,2866 ,2867 ,2868 ,2868	-9,4172 ,4167 ,4163 ,4144 ,4139	3391 3393 3394 3398 3399	3. - 2,56 - 2,89 - 0,44 - 1,70 - 3,63	5.	- 6,47 - 5,21 + 3,16 - 4,03 + 3,08
1851 1852 1853 1864 1865	61 33 35,51 29 18 47 46 31,87	19,354 19,361 19,370 19,370 19,374	+9,6730 ,6375 ,7024 ,6830	-1-9,8839 ,9292 ,6753 ,8549 ,6727	-1,2868 ,2869 ,2871 ,2871 ,2872	9,4144 ,4120 ,4092 ,4092 ,4078	3397 3402 3405 3407 3408	$ \begin{array}{c c}  & 3,04 \\  & 2,43 \\  & 2,49 \end{array} $	- <del>5,81</del> - <del>4,41</del>	- 0, <b>0</b> 2 + 4,05 + 4,07
1856 1857 1858 1859 1860	61 31 29,49 68 6 31,28 56 J1 59,36	19,383 19,387 19,401 19,403 19,404	+9,7016 ,6703 ,6454 ,6522 ,6324	+9,6699 ,8795 ,9160 ,9057 ,9283	-1,2874 ,2876 ,2878 ,2879 ,2879	.—9,4049 ,4039 ,3991 ,3986 ,3981	3410 3412 3416 3417 3419	- 2,21 - 1,69	$ \begin{array}{r} -3,14 \\ -3,18 \\ -3,29 \end{array} $	+ 7,95 + 9,16 + 2,41 - 0,17 + 1,96
1861 1862 1863 1864 1864	28 55 36,21 53 50 49,29 35 13 46,00	19,410 19,413 19,420 19,428 19,425	+9,6325 ,6990 ,6580 ,6955 ,6415	+9,9267 ,0711 ,8936 ,7477 ,9148	-1,2880 ,2881 ,2882 ,2883 ,2883	-9,3961 ,3952 ,3927 ,3917 ,3912	3423 3421 3427 3428 3429	$ \begin{array}{c c} -2,70 \\ -2,41 \\ -4,32 \end{array} $		- 0,89 + 7,81 + 5,78 + 0,76
1866 1867 1868 1869 1870	35 21 28,84 59 81 0,55 55 34 58,25	19,437 19,437 19,447 19,449 19,444	+9,6712 ,6946 ,6314 ,6395 ,6958	+9,8633 ,7494 ,9225 ,9136 ,6282	-1,2886 ,2886 ,2889 ,2889 ,2888	9,3867 ,3867 ,3832 ,3827 ,3842	3433 3432 3437 3439 3436	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		+ 5,65 - 5,64 - 3,86 +13,44 + 6,57
1871 1872 1873 1874 1876	63 41 17 02 31 33 54,97 59 30	19,4 <i>5</i> 4 19,4 <i>5</i> 6 19,461 19,449 19,463	+9,6674 ,6432 ,6946 ,6814 ,6946	+9,8670 ,8934 ,7066 ,9224 ,6719	—1,2890 ,2890 ,2892 ,2889 ,2892	—9,3806 ,3801 ,3781 ,3827 ,3776	3440 3441 3443 3458 3444	1,94		+11,82 + 5,18 + 0,27 + 4,25
1876 1878 1878 1878 1880	57 33 14,09 59 33 48 13 55,84	19,467 19,474 19,474 19,476 19,479	+9,6758 ,6356 ,6263 ,6674 ,6928	+9,8401 ,9140 ,9232 ,8605 ,6235	—1,2893 ,2894 ,2894 ,2895 ,2896	-9,3760 ,3734 ,3734 ,3724 ,3713	3446 3460 3451 3462 3454	$\frac{2,42}{2,86}$	- 3,94 	+ 0,75 + 5,88 + 6,16 + 2,43
1881 1882 1884 1886	29 54 60 27 59 26 52,12	19,485 19,486 19,485 19,486 19,491	+9,6637 ,6928 ,6212 ,6243 ,6618	+9,8649 ,6725 ,9274 ,9230 ,8676	1,2897 ,2897 ,2897 ,2897 ,2898	9,3692 ,3687 ,3692 ,3687 ,3666	3467 3468 3469 3469	3		- 1,86 - 0,17 + 6,28
1886 1888 1888 1888 1890	50 55 54,36 58 44 52,49 51 58 58,03	19,501 19,603 19,603 19,505 19,506	+9,6513 ,6551 ,6263 ,6655 ,6646	+9,8869 ,8784 ,9203 ,8848 ,8576	-1,2900 ,2901 ,2901 ,2901 ,2902		3470 3472 3474 3474 3476	0,46	- 3,46 3,24	<b>− 6,8</b> 6

N.	N.	Man	No.		Annual		Logari	thms of	
No.	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	b	C	d
1891 1892 1893 1894 1895	Antl. Pneum. Centauri Argus	7.8 7.8 7.8 8	3 5 7 3 2	H. M. s 11 7 21,75 7 56,41 7 8 2,56 8 6,43	.s + 2,875 2,814 2,815 2,801 2,601	-8,8863 8,9298 8,9293 8,9401 9,0816	-1-8,2537 ,2925 ,2915 ,3017 ,4420	+-0,4586 ,4493 ,4495 ,4473 ,4151	4-8,6163 8,7399 8,7386 8,7636 9,0072
1896 1897 1898 1899 1900	Argus Centauri Antl. Pneum. Argus	8 6.7 7 7.8 7.8	3 6 3 4	8 16,40 8 34,29 8 39,05 8 40,34 8 42,28	2,604 2,818 2,870 2,621 2,610	-9,0804 8,9299 8,8935 9,0713 9,0787	+8,4398 ,2868 ,2193 ,4271 ,4345	4-0,4091 ,4499 ,4579 ,4156	9,003 <b>0</b> 8,6396 8,6396 8,9925
1901 1902 1903 1904 1905	Hydræ Argus Centauri Antl. Pneum.	7.8 7.8 8 6.7 7	3 2 2 2 2 3	8 44,48 8 50,41 8 58,12 9 2,65 9 10,04	2,916 2,657 2,662 2,774 2,843	-8,8648 9,0477 9,0449 8,9639 8,9141	+8,2189 ,4018 ,6984 ,3168 ,2646	4-0,4648 ,4244 ,4252 ,4461 ,4638	+8,5255 8,0577 8,0534 8,8137 8,6990
1906 1907 1908 1909 1910	Antl. Pneum. Argus Antl. Pneum. Argus	8.9 7 7 7.8	333	9 47,87 9 64,46 9 67,30 10	2,849 2,671 2,883 2,874 2,574	-8,9110 9,0436 8,8884 8,8943 9,1136	+8,2592 ,3893 ,2636 ,2388 ,4567	+0,4547 ,4267 ,4598 ,4585 ,4100	4 8,6905 8,9513 8,6208 8,6404 9,0508
1 1	Centauri Antl. Pneum,	7 7.8 7.8 7 7	000000	10 16,59 10 47,86 10 53,30 10 56,59 11 38,91	2,593 2,609 2,609 2,755 2,837	9,1008 9,0942 9,0947 8,9880 8,9277	+8,4425 ,4297 ,4295 ,3229 ,2577	+0,4138 ,4105 ,4166 ,4401 ,4520	4-9,0335 9,0244 9,0250 8,8688 8,7826
1916 1917 1918 1919 1920	Hydræ Argus Hydræ	7 7.8 6.7 6.7	3 4 - 2 3	11 37,08 11 39,42 11 11 58,45 12 31,59	2,922 2,633 2,635 2,925 2,925	-8,8668 9,0820 9,0817 8,8658 8,8667	+8,1962 ,4114 ,4098 ,1920 ,1872	+0,4657 +,4204 +,4208 +,4661 +,4661	-1-8,6332 9,0073 9,0068 8,6278 -8,5308
1921 1922 1923 1924 1925	Antl. Pneum Argus  Centavri Antl. Pneum.	7.8 8 7.8 7 7.8	3 6 3 3 3	12 44,83 12 48,46 12 56,43 12 58,74 13 26,06	2,903 2,644 2,628 2,798 2,882	-8,8828 9,0821 9,0946 8,9644 8,8999	+8,2015 ,4008 ,4116 ,2812 ,2116	-1-0,4628 ,4223 ,4196 ,4468 ,4597	+8,5977 9,0072 9,0246 8,8130 8,6551
1926 1927 1928 1929 1930	Centauri Argus Centauri	6.7 6	3 3 1 4	13 35,44 14 34,48 14 50,08 15 5,19 15 5,70	2,800 2,607 2,818 2,658 2,661	-8,9658 9,1215 8,9571 9,0879 9,0868	+8,2708 ,4228 ,2558 ,3840 ,3818	+0,4472 ,4161 ,4499 ,4246 ,4250	+8,8155 9,0607 8,7973 9,0150 9,0119
1931 1982 1983 1934 935	Hydræ Centauri	6.7	2 2 3 2 4	15 37,41 15 53,43 16 0,78 16 6,98 16 26,99	2,667 2,692 2,944 2,664 2,675	-9,0852 9,0676 8,8627 9,0910 9,0849	-1-8,3768 ,3655 ,1493 ,3762 ,3674	+0,4260 ,4301 ,4689 ,4255 ,4273	+9,0110 8,9853 8,5063 9,0191 9,0105

	Declination.	Annual	<del></del>	Logari	thms of		Diffe		he Brisbane scension	Catalogue.
No.	(South.) Jan. 1. 1840.	Precession	a'	b'	c'	d'	No.	fro M.O.	om ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	Deolin.
1891 1892 1893 1894 1895	32 26 54,47 40 11 12,71 40 6 41 44 43,15 57 23 16,16	-19,518 19,529 19,530 19,531 19,634	+9,6384 -,6776 -,6785 -,6749 -,6253	+9,7185 ,7988 ,7980 ,8123 ,9145	-1,2904 ,2907 ,2907 ,2907 ,2008	9,3569 ,3515 ,3510 ,3604 ,3493	3479 3481 3482 3483 3485	$ \begin{array}{c c} -2,87 \\ -3,76 \\ \hline -3,68 \\ +0,03 \end{array} $	S	$ \begin{array}{r}     -0.86 \\     -7.22 \\     \hline     -1.43 \\     -2.29 \end{array} $
1896 1897 1898 1899 1900	57 18 35,92 40 9 0,11 33 47 42,30 56 29 0,83 57 7 9,31	19,537 19,542 19,544 19,543 19,544	+ 9,6170 ,6767 ,6848 ,6232 ,6243	+9,0141 ,7988 ,7346 ,9103 ,9131	-1,2908 ,2910 ,2910 ,9910 ,2910	-9,3482 ,3460 ,3449 ,3449 ,3449	3487 3489 3490 3493 3495	2,03 - 2,76 - 3,05 - 2,96 - 2,16	2,95	-1,40,21 - 4,74 + 1,95 + 1,00 - 3,58
1901 1902 1903 1904 1905	27 15 29,98 54 20 12,73 54 4 43,15 45 0 40,52 37 31 37,65	19,547 19,549 19,549 19,551 10,666	(+9,6878 ,6355 ,6355 ,6646 ,6785	+9,6504 ,8991 ,8977 ,8390 ,7743	-1,2911 ,2911 ,2911 ,2912 ,2913	9,3438 {,3432 ,3427 ,3421 ,3399	3496 3499 3500 3501 3502	+ 0,36 0,97 3,41 2,54 2,45	— <del>3,3</del> 9	+ 4,05 + 1,46 + 5,96 - 0,95 - 1,17
1906 1907 1908 1909 1910	36 58 53 54 1,57 32 39 29,63 33 51 47,10 59 53	19,561- 19,566 19,567 19,569 19,574	+9,6794 ,6345 ,6830 ,6812 ,6064	+9,7689 ,8972 ,7225 ,7357 ,9269	-1,2914 ,2915 ,2915 ,2916 ,2917	—9,3376 ,3353 ,3348 ,3342 ,3319	3505 3507 3509 3510 3512	- 2,74 - 3,47 - 1,87		+ 2,38 - 4,97 + 6,48
(911 (912 1913 (914 (915	58 53 45,35 58 20 1,47 58 21 43,91 47 54 45,81 39 37 35,35	19,575 19,587 19,592 19,587 19,588	+9,6107 ,6107 ,6107 ,6513 ,6693	+9,9225 ,9202 ,9204 ,8608 ,7952	-1,2917 ,2920 ,2921 ,2920 ,2922	9,3315 ,3255 ,3249 ,3249 ,3202	3513 3518 3519 3517 3521	- 0,55 + 7,64 + 6,70 - 2,84 - 2,84	+ 4,51	+ 3,56 + 5,03 + 12,27 + 6,07 - 1,71
1916 1917 1918 1919 1920	57 18 44,94 57 16 27 18 46,36	19,599 19,599 19,602 19,606 19,616	+9,6912 ,6128 ,6117 ,6891 ,6803	+9,6567 ,9155 ,9154 ,6524 ,6549	-1,2922 ,2922 ,2923 ,2924 ,2926	-9,3197 ,3197 ,3185 ,3167 ,3113	3523 3524 3526 3527 3529	- 1,96 - 3,05 - 2,75 - 0,90		$ \begin{array}{c} -2,65 \\ -2,55 \\ -1,21 \\ -2,18 \end{array} $
1921 1922 1923 1924 1925	57 16 47,07 58 18 43,94 44 51 11,59	19,620 19,620 19,622 19,623 19,633	+9,6785 ,6075 ,6031 ,6532 ,0730	+9,7058 ,9158 ,9208 ,8394 ,7462	—1,2927 ,2927 ,2927 ,2928 ,2930	—9,3095 ,3095 ,3076 ,3076 ,3027	3531 3532 3535 3533 3539	- 2,17 - 3,32 - 2,85 - 3,06 - 1,51		0,00 - 4,88 + 5,28 - 7,47 + 4,85
1926 1927 1928 1929 1930	60 21 8,16 43 45 59,67 57 41	19,634 19,651 19,656 19,660 19,660	+9,0522 ,5855 ,6513 ,6978 ,5988	+9,8408 ,9307 ,8318 ,9187 ,9179	-1,2930 ,2934 ,2935 ,2936 ,2936	—9,3021 ,2928 ,2902 ,2877 ,2877	3540 3549 3550 3552 3553	$ \begin{array}{r} -3,57 \\ -4,31 \\ -3,28 \\ -2,14 \end{array} $	$ \begin{array}{c}     \hline                                $	$ \begin{array}{r} -1,97 \\ -0,81 \\ +.2,74 \\ \hline 0,00 \end{array} $
1931 1932 1933 1934 1938	2 55 54 9,31 3 26 4 53,65 1 57 54 33,85	19,669 19,674 19,676 19,678 19,683	+9,5966 ,6031 ,6749 ,5911 ,5944	+9,9177 ,9102 ,6357 ,9202 ,9178	-1,2938 ,2939 ,2959 ,2940 ,2941	-9,2825 ,2799 ,2786 ,2773 ,2747	3555 3557 3558 3559 3561	- 2,22 - 2,39 - 1,61 - 2,06 - 2,88		- 2,41 - 1,91 - 0,84 + 9,21 - 0,34

No.	Names.	Man	No.	Right Ascen.	Annual		Logarit	hms of	
110.	rathes.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	а	6	c }	d
1936 1937 1938 1939 1940	Centanri Hydræ Centauri Hydræ	7 7.8 8 8.9 7	333333	H. M. S. 11 16 43,89 16 44,43 17 52,37 17 12,54 17 49,27	# 2,845 2,903 2,845 2,683 2,885	8,9439 8,8948 8,9459 9,0842 8,9137	+8,2230 ,1739 ,2217 ,3584 ,1816	+0,4541 ,4628 ,4541 ,4286 ,4601	+8,7678 8,6359 8,7679 9,0094 8,6921
1941 1942 1943 1944 1945	Centauri	7.8 8.9 9.10 6.7	6 3 3	18 6,83 18 18 48,58 18 59,01 19 21,44	2,826 2,679 2,679 2,703 2,764	-8,9674 9,0988 9,0988 9,0817 9,0808	+8,2326 ,3575 ,3568 ,3368 ,2823	-1-0,4512 ,4280 ,4280 ,4318 ,4415	+8,8172 9,0296 9,0296 9,0056 8,9292
1946 1947 1948 1949 1950	Centauri Hydræ Centauri Hydræ	7.8 7.8 7.8	6 2 3 -3	19 25,84 19 43,29 19 49,75 19 20 22,04	2,658 2,960 2,657 2,663 2,900	-9,1217 8,8600 9,1251 9,1219 8,9108	+8,3724 ,1078 ,3712 ,3667 ,1511	+0,4245 ,4713 ,4244 ,4254 ,4624	+9,0604 8,4862 9,0649 9,0605 8,6824
1951 1952 1953 1954 1956	Centauri	8 7 7.8 7.8 7	3 3 2 1	20 25,85 20 33,88 20 45,90 20 47,89 20 53,80	2,678 2,706 2,786 2,842 2,866	9,1139 9,0913 9,0206 8,9674 8,94 <i>5</i> 3	+8,3528 ,3294 ,2572 ,2023 ,1796	+0,4278 ,4323 ,4450 ,4536 ,4573	+9,0499 9,0189 8,9123 8,8163 8,7692
1956 1957 1958 1959 1960	Centauri Hydræ Centauri	7 7:8 9:10 - 6:7 7	3 3 3 2 3	21 12,53 21 15,06 21 26,09 21 42,98 21 45,07	1 2,759 2,719 2,717 2,955 2,716	9,0488 9,0849 9,0879 8,8687 9,0929	+8,2794 ,3155 ,3177 ,0931 ,3172	+0,4407 ,4844 ,4341 ,4706 ,4838	+8,9670 9,0099 9,0141 8,6285 9,0210
1961 1962 1963 1964 1965	Antl. Pneum Centauri	6,7 7,8 7,8 7,8	3 3 3 3	21 55,41 21 59,79 22 20,18 22 22,09 22 32,68	2,899 2,730 2,*59 2,801 2,766	-8,9191 9,0816 8,9599 9,0175 9,0531	+8,1411 ,3029 ,1773 ,2349 ,2681	+0,4622 ,4362 ,4562 ,4473 ,4418	+8,7045 9,0052 8,8004 8,9069 8,9633
1966 1967 1968 1969 1970	Centauri	7.8 7.8 7.8 7.8 7.8	3 2 2 2	23 12,39 23 24,65 23 28,99 23 42,79 23 53,68	2,883 2,730 2,865 2,867 2,867	-8,9410 9,0938 8,9624 8,9600 8,9608	+8,1480 ,2984 ,1637 ,1605 ,1596	+0,4598 ,4362 ,4289 ,4574 ,4574	+8,7585 9,0221 8,8051 8,8001 8,8016
1971 1972 1973 1974 1976	Centauri Hydræ Centauri	7 678	5 5 3	23 57,80 23 24 23,86 24 27,39 24 28,44	2,701 2,703 2,732 2,769 2,717	-9,1253 9,1275 9,1017 8,8647 9,1165	+8,3234 ,3206 ,2939 ,0562 ,3079	+0,4315 + 4318 + 4365 + 4726 + 4341	4-9,0647 9,0675 9,0328 8,5050 9,0529
1976 1977 1978 1979 1980		7.8 8.9 -7.8	1 8 8 3	25 25 25 33,95 26 12,06 26 43,53	2,736 2,736 2,799 2,770 2,750	9,1044 9,1054 9,0443 9,0806 9,1054	+8,2874 ,2885 ,2222 ,2499 ,2685	+0,4371 ,4370 ,4470 ,4425 ,4393	+9,0364 9,0379 8,9493 9,0031 9,0377

	Declination	Annual		Logarit	hma of		Diller	ence from the Right A	e Brisbane scension	Catalogue.
No.	(South.) Jan. 1, 1840.	Precession	a'	b'	c'	d'	No.	M, C.	om   T.	Declin.
1936 1937 1938 1939 1940	41 47 26,59 33 24 24,29 41 47 35,41 57 18 11,38 36 52 5,40	19,689 19,689 19,690 19,695 19,706	+9,6513 ,6674 ,6503 ,5899 ,6590	+9,8162 ,7384 ,8163 ,9177 ,7711	-1,2942 ,2942 ,2942 ,2944 ,2946	9,2714 ,2714 ,2701 ,2667 ,2606	3564 3563 3569 3570 3573	3. — 8,84 — 2,67 —59,75 — 2,60 — 2,40	<u>s.</u> 	+ 0,40 - 2,60 + 1,44 - 1,35 - 1,83
1941 1942 1943 1944 1946	45 0 6,48 58 58 21,70 57 2 46,02 52 16 52,67	19,710 19,719 19,720 19,725 19,730	+9,6385 ,5786 ,5786 ,5855 ,6064	+9,8425 ,9237 ,9238 ,9170 ,8916	—1,2947 ,2949 ,2949 ,2950 ,2951	9,2579 ,2517 ,2510 ,2482 ,2447	3576 3577 3678 3580 3582	$ \begin{array}{r} -2,87 \\ -2,58 \\ -1,36 \\ -2,50 \end{array} $	- 0,10 	$ \begin{array}{r} -5,13 \\ +5,69 \\ -4,22 \\ +1,12 \end{array} $
1946 1947 1948 1949 1950	60 14 9,71 24 58 59,63 60 29 23,62 60 14 9,64 36 12 19,63	19,781 19,735 19,736 19,739 19,745	+9,5647 ,6702 ,5623 ,5623 ,6542	+9,9319 ,6195 ,9331 ,9321 ,7652	—1,2951 ,2952 ,2952 ,2953 ,2954	9,2439 ,2411 ,2404 ,2382 ,2339	3584 3585 3586 3587 3588	- 2,86 - 2,29 - 2,42 - 2,14	3,48	+ 1,86 3,52 3,56 + 0,46 8,75
1951 1952 1953 1954 1955	59 36 59,08 57 47 49,34 51 10 14,40 44 53 42,19 41 47 36,19	19,747 19,748 19,750 19,751 19,752	+9,5635 ,6740 ,6064 ,6304 ,6395	+9,9296 ,9212 ,8854 ,8425 ,8177	—1,2955 ,2955 ,2956 ,2956 ,2956	0,2324 ,2317 ,2302 ,2295 ,2280	3590 3591 3592 3593 3595			- 5,62 + 5,40 + 3,45 + 0,66 + 1,29
1956 1957 1958 1959 1960	54 0 4,81 57 15 41,62 57 30 45,60 27 8 56,28 57 54 36,06	19,757 19,757 19,758 19,765 19,765	+9,5922 ,5752 ,5729 ,6637 ,5682	+9,9019 ,9188 ,9200 ,6537 ,9221	—1,2957 ,2957 ,2957 ,2969 ,2959	9,2243 ,2243 ,2236 ,2184 ,2184	3596 3597 3598 3600 3601	- 8,96		+ 1,45 - 4,25 - 7,11 + 1,99 + 5,22
1961 1962 1963 1964 1965	37 34 30,32 56 57 4,15 43 48 31,94 50 47 9,62 54 22 52,44	19,768 19,768 19,774 19,774 19,777	+9,6474 ,5729 ,6294 ,6021 ,5855	+9,7795 ,9175 ,8346 ,8835 ,9044	-1,2960 ,2960 ,2961 ,2961 ,2961	-9,2161 ,2153 ,2115 ,2115 ,2092	3603 3605 3607 3608 3611	-2,50 $-2,34$	3,42	- 1,71 + 1,69 + 3,46 + 1,09 - 7,60
1966 1967 1968 1969 1970	57 55 41,82 44 5 6,37 43 44 42,43	19,786 19,789 19,792 19,793 19,795	+9,6345 ,5611 ,6243 ,6243 ,6243	+9,8120 ,9228 ,8373 ,8347 ,8365	—1,2964 ,2964 ,2965 ,2965 ,2966	-9,2014 ,1991 ,1969 ,1951 ,1935	3613 3617 3623 3624 3626	- 2,14		+ 1,85 + 7,72 2,39 + 8,97 + 3,38
1971 1972 1973 1974 1975	58 33 30,92 25 51 55,22	19,803	+9,5441 ,5403 ,5527 ,6599 ,5465	+9,9341 ,9348 ,9259 ,6351 ,9312	-1,2966 ,2967 ,2967 ,2967 ,2967	-9,1927 ,1879 ,1871 ,1863 ,1863	3627 3630 3631 3632 3634	$-\frac{2,32}{0,88}$	-3,13 $-2,44$	+ 2,27 + 4,03 - 1,77 - 2,24
1976 1977 1978 1979 1980	58 50 53 26 26,92 56 45 40,20	19,826	+9,5490 ,5478 ,5775 ,5563 ,5416	+9,9271 ,9275 ,9001 ,9178 ,9277	-1,2969 ,2969 ,2970 ,2972 ,2974	,1646	3642 3643 3647 3650 3653	$\begin{bmatrix} -2,05 \\ -2,28 \end{bmatrix}$	\ <del>``</del>	4,08 6,79 + 4,11

No.	Names.	Mag.	No.	Right Ascen.	Annual		Logari	thms of	Angele Communication in the Language Communication
1			Obs.	Jan. 1, 1840.	Precesn.	α	6	c	d
1981 1982 1983 1984 1985	Centauri Hydræ A Centauri C	8.9 7.8 6 7.8 6.7	3 3 3 3 2	H. M. S. 11 26 51,87 27 8,33 27 11,91 27 27,44 27 31,65	s. +2,776 2,959 2,813 2,824 2,871	-9,0806 8,8814 9,0443 9,0340 8,9819	+8,2410 ,0382 ,2002 ,1872 ,1334	+ 0,4434 ,4711 ,4492 ,4509 ,4580	+9,0030 8,5786 8,9490 8,9327 8,8426
1986 1987 1988 1989 1990	***************************************	8 6 8 6	3 3 3 2	27 52,94 27 59,00 28 11,80 28 18,92 28 18,14	2,746 2,848 2,873 2,861 2,745	-9,1211 9,0104 8,9842 9,0107 9,1266	4 8,2680 ,1564 ,1265 ,1521 ,2679	+0,4387 ,4545 ,4583 ,4560 ,4385	-1-9,0588 8,8938 8,8468 8,8942 9,0660
1991 1992 1993 1994 1995	Centauri E Hydræ Centauri	7.8 7.8 7.8 6.7	3  3 3	28 21,00 28 23,49 28 28 41,80 28 56,64	2,741 2,870 2,745 2,940 2,754	9,1304 8,9890 9,1305 8,9080 9,1236	+8,2708 ,1285 ,2662 ,0427 ,2565	+0,4541 ,4579 ,4385 ,4683 ,4400	+9,0710 8,8557 9,0711 8,6694 9,0620
1996 1997 1998 1999 2000	Centauri	7.8 7 8 6 7.8	2 4 2 2 3	29 2,65 29 6,85 29 12,28 29 38,86 29 47,32	2,748 2,928 2,928 2,759 2,884	-9,1317 8,9240 8,9243 9,1269 8,9819	4-8,2617 ,0541 ,0534 ,2492 ,1024	-1-0,4390 ,4673 ,4666 ,4407 ,4600	+9,0727 8,7144 8,7149 9,0663 8,8421
2001 2002 2003 2004 2005	C <sup>2</sup> Centauri	8 7 7 7.8 7.8	23223	29 46,47 29 50,75 30 4,36 30 5,32 30 10,24	2,837 2,882 2,775 2,761 2,768	-9,0395 8,9855 9,1148 9,1297 9,1231	+8,1509 ,1039 ,2303 ,2452 ,2366	+0,4529 ,4597 ,4433 ,4411 ,4422	+8,9412
2006 2007 2008 2009 2010	Centauri	 6 7.8 8 8 7.8	3 3 3	30 30 40,88 30 55,93 31. 2,63 31 36,28	2,033 2,763 2,030 2,889 2,817	-8,9268 9,1344 8,9327 8,9867 9,0831	+8,0344 ,2409 ,0352 ,0872 ,1754	+0,4673 ,4414 ,4669 ,4609 ,4498	+8,7210 9,0760 8,7358 8,8508 9,0062
2011 2012 2013 2014 2015	Centauri	8.9 8 7.8 1.0	3 3 5 5	31 40,41 32 5,16 32 9,65 32 18,89 33 0,53	2,869 2,778 2,879 2,900 2,860	9,0177 9,1342 9,0094 8,9685 9,0426	-1-8,1090 ,2192 ,0933 ,0524 ,1126	+0,4577 ,4437 ,4592 ,4637 ,4564	+8,9056 9,0758 8,8913 8,8152 8,9457
2016 2017 2018 2019 2020	Hydrae Centauri Hydræ Centauri	7.8 .7.8 .6 .7 7.8	3 3 3 3	33 12,60 33 18,55 33 21,79 33 26,99 33 30,27	2,985 2,358 2,788 2,962 2,962 2,939	-8,8765 9,0485 9,1386 8,9063 8,9377	+7,9420 8,1140 6,2031 7,9686 7,9989	+0,4616 ,4561 ,4468 ,4716 ,4682	+ 8,5530 8,9547 9,0814 8,6622 8,7472
2021 2022 2023 2024 2026	Centauri Hydrae Centauri	7.8 7.8 8 6 7.8	3 3 3 3 3	34 17,95 34 37,08 35 0,78 35 30,24 35 47,09	2,817 2,845 2,822 2,964 2,890	9,1140 9,0817 9,1167 8,9154 9,0299	+8,1628 8,1247 8,1527 7,9418 8,0527	+0,4498 ,4541 ,4506 ,4719 ,4609	

	Declination.	Annual	<u> </u>	Logari	thms of		Dlffo		he Brisbane scension	Catalogue.
No.	<i>(South.)</i> Jan. 1. 1840.	Precession	<i>a'</i>	<i>b'</i>		d'	No.		om T.	Declin.
1981 1982 1983 1984 1985	56 44 33,92 29 50 29,76 53 22 48,24 52 21 30,77 46 29 15,96	" 19,834 19,838 19,839 19,841 19,843	-1-9,5539 ,6503 ,5717 ,6752 ,6031	+9,9179 ,6928 ,9008 ,8944 ,8564	-1,2974 ,2975 ,2975 ,2976 ,2976	—9,1560 ,1524 ,1516 ,1489 ,1471	3654 3655 3657 3658 3660	s. - 2,32 - 2,32 - 1,90 - 3,42 - 1,41	3,00 - 2,52	+ 2,82 + 4,13 + 0,96 + 0,58 + 2,90
1986 1987 1988 1989 1990	60 0 35,70 49 50 22,47 46 45 15,52 49 51 32,52 60 24 7,71	19,847 19,848 19,851 19,852 19,852	+9,5276 ,5866 ,5988 ,5855 ,5224	+9,9334 ,8792 ,8584 ,8794 ,9353	1,2977 ,2977 ,2978 ,2978 ,2978	-9,1426 ,1417 ,1381 ,1372 ,1372	3661 3662 3663 3664 3665	- 1,72 - 3,39 - 1,50 - 3,78 - 2,86	- 3,76 - 3,97	+ 1,04 + 0,87 + 2,26 + 1,48 + 5,40
1991 1992 1993 1994 1995	60 41 36,48 47 20 40,84 60 41 35 14 15,03 60 10 7,93	19,852 19,853 19,856 19,857 19,859	-1-9,5198 ,5966 ,5185 ,6356 ,6211	+9,9365 ,8626 ,9366 ,7575 ,9344	—1,2978 ,2978 ,2979 ,2979 ,2979	-9,1363 ,1354 ,1317 ,1308 ,1289	3666 3667 3672 3671 3675	- 2,32 - 1,08 - 3,43	2,87	$ \begin{array}{c c} -11,15 \\ -3,31 \\ -8,16 \\ +0,69 \end{array} $
1996 1997 1998 1999 2000	60 46 48,14 38 4 22,93 38 6 60 23 44,97 46 25 8,67	19,861 19,861 19,862 19,867 19,869	+9,5172 ,6263 ,6263 ,5159 ,5955	+9,9370 ,7864 ,7867 ,9356 ,8564	1,2980 ,2980 ,2980 ,2981 ,2982	-9,1261 ,1261 ,1262 ,1186 ,1167	3679 3678 3680 3681 3682	- 0,69 - 2,38 - 4,35 - 2,57 - 3,25	3,88	- 0,39 + 2,12 + 11,48 - 8,66
2001 2002 2003 2004 2005	52 51 5,21 46 51 45,95 59 28 45,77 60 35 58,14 60 5 53,41	19,869 19,870 19,872 19,872 19,874	+9,5635 ,5933 ,5198 ,5132 ,5169	4-9,8979 ,8696 ,9316 ,9366 ,9345	1,2982 ,2982 ,2982 ,2982 ,2983	-9,1167 ,1147 ,1118 ,1118 ,1099	3683 3684 3685 3680 3687	- 1,97 - 2,97 - 2,50 - 2,16 + 0,84	3,86	+ 0,76 - 0,88 - 5,26 - 3,73 + 8,43
2006 2007 2008 2009 2010	38 28 60 56 27,98 39 25 0,66 46 57 52,51 56 51 10,73	19,878 19,879 19,882 19,884 19,889	+9,6222 ,5079 ,6180 ,5888 ,5315	+9,7906 ,9382 ,7996 ,8607 ,9197	-1,2984 ,2984 ,2985 ,2985 ,2986	-9,1040 ,1030 ,0991 ,0971 ,0890	3688 3689 3692 3694 3696	- 1,92 - 2,28 - 1,89 - 1,07	1,76 - 3,12	+ 2,34 - 3,30 + 3,87 + 3,14
2011 2012 2013 2014 2015	50 S2 20,82 60 54 46,29 49 36 1,27 44 41 36,00 53 4 47,85	19,890 19,894 19,895 19,895 19,904	+9,5082 ,4997 ,5717 ,5955 ,5478	+9,8845 ,9583 ,8787 ,8435 ,9000	—1,2986 ,2987 ,2987 ,2987 ,2989	-9,0879 ,0818 ,0807 ,0807 ,0670	3697 3701 3702 3704 3709	- 0,89 - 3,66 - 3,01 -10,99 - 2,60		$ \begin{array}{c} + 3,16 \\ - 5,65 \\ + 0,59 \\ - 5,37,44 \\ + 2,94 \end{array} $
2016 2017 2018 2019 2020	53 39 39,16 61 12 10,23 34 43 2,60	19,907 19,907 19,908 19,909 19,910	-F9,6405 ,5441 ,4914 ,6253 ,6085	+9,6736 ,9033 ,9399 ,7530 ,8066	—1,2990 ,2990 ,2990 ,2990 ,2991	9,0626 ,0626 ,0615 ,0694 ,0583	3712 3714 3716 3716 3718	+ 1,44 - 2,20 - 2,25 - 2,32 - 1,57	$ \begin{array}{r}     -3,08 \\     -3,11 \end{array} $	- 5,59 + 0,49 + 2,72 - 5,43 - 9,44
2021 2022 2023 2024 2025	36 18 5,22	19,917 19,920 19,924 19,929 19,931	+9,5011 ,5185 ,4966 ,6159 ,5453	+9,9320 ,9196 ,9331 ,7702 ,8927	—1,2992 ,2993 ,2994 ,2995 ,2995	-9,0460 ,0403 ,0334 ,0240 ,0204	3724 3726 3731 3734 3736	- 3,68 - 2,44 - 0,74 - 2,34 - 3,50	$-\frac{\overline{3,82}}{}$	$ \begin{array}{c c} -2,46 \\ +4,20 \\ -6,07 \\ -2,75 \\ +2,10 \end{array} $

No.	Names.		No.	Right Ascen.	Annual		Logari	ithms of	***************************************
].	rantes.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	1 6	1	1 d
2026 2027 2028 2029 2030	Centauri	7 6 7 6.7 8	3 3 2 3 2	H. M. S. 11 35 51,70 35 55,39 36 16,79 36 47,22 37 0,52	5. +2,874 2,811 2,810 2,917 2,882	-9,0558 9,1447 9,1502 8,9986 9,0589	+8,0762 8,1639 8,1633 8,0041 8,0555	+ 0,4585 ,4488 ,4487 ,4649 ,4597	+8,9656 9,0892 9,0962 8,8716 8,9701
2031 2032 2033 2034 2035	Centauri	7 6 8 9 7.8	2 3 3 3	37 8,42 37 21,74 37 49,95 37 56,15 38 1,96	2,907 2,922 2,921 2,906 2,921	-9,0203 8,9981 9,0048 9,0310 9,0057	+8,0169 7,9909 7,9861 8,0119 7,9866	-1-0,4634 ,4657 ,4655 ,4633	+8,9090 8,8707 8,8825 8,9265 8,8840
2036 2037 2038 2039 2040	Hydrm Centauri	7 5.6 10 8	2 2 3 2	38 19,30 38 38 48,52 38 48,44 38 53,68	3,004 2,839 2,854 2,862 2,846	-8,8725 9,1474 9,1273 9,1149 9,1395	+7,8440 8,1120 8,0905 8,0782 8,1014	+0,4777 ,4532 ,4554 ,4667 ,4542	+8,5310 9,0924 9,0662 9,0496 9,0822
2041 2042 2043 2044 2045	Gentauri Hydræ Gentauri Hydræ	7 7 7 6.7 7.8	3 2 3 2 3	38 54,45 39 0,09 39 24,29 39 32,08 40 4,55	2,967 2,845 2,998 2,887 2,990	-8,9357 9,1425 8,8864 9,0842 8,9056	+7,8962 8,1030 7,8370 8,0319 7,8417	+0,4723 ,4541 ,4768 ,4604 ,4757	-1-8,7408 9,0861 8,5906 9,0069 8,6573
2046 2047 2048 2049 2050	Contauri	9 7.8  6.7 7.8	3 3 3 3	41 18,13 41 23,09 41 41 31,31 41 37,04	2,959 2,904 2,875 2,961 2,888	-8,9757 9,0845 9,1367 8,9747 9,1179	+7,8844 7,9900 8,0423 7,8771 8,0171	+0,4711 ,4630 ,4586 ,4714 ,4606	+ 8,8278 9,0072 9,0785 8,8258 9,0536
2051 2052 2053 2054 2055	Centauri Hydræ Centauri	8 6.7 7 6.7 9	3 3 3 3 3	41 59,56 42 9,82 42 33,24 42 39,68 42 52,39	2,983 2,942 3,019 2,882 2,916	-8,9347 9,0222 8,8706 9,1480 9,0862	+7,8258 7,9100 7,7484 8,0225 7,9556	+0,4746 ,4686 ,4798 ,4597 ,4648	+8,7374 8,9117 8,6188 9,0931 9,0096
2056 2057 2058 2059 2060	Contauri Hydræ Contauri	G.7 7 6 7.8 8	32323	43 13,84 43 23,44 43 37,10 43 40,18 44 6,88	2,978 2,896 3,014 2,991 2,943	8,9590 9,1370 8,8851 8,9351 9,0490	+7,8179 7,9924 7,7352 7,7834 7,8863	+0,4739 ,4618 ,4791 ,4758 ,4688	+8,7932 9,0787 8,5837 8,7382 8,9545
2061 2062 2063 2064 2065	Centauri	9 5.6 7.8 6.7 7	3 2 3 3	44 16,55 44 17,62 44 20,13 46 14,22 46 25,66	2,929 2,933 2,969 2,948 3,010	-9,0858 9,0768 9,0188 9,0818 8,9202	+7,9194 7,9086 7,8487 7,8557 7,6854	+0,4667 ,4673 ,4711 ,4695 ,4633	+9,0090 8,9961 8,9058 9,0032 8,6984
2066 2067 2068 2069 2070	Centauri Hydræ Centauri	7.8 7 7 7.8 7	3 3 3 2 3	46 26,96 46 34,56 46 58,04 47 28,31 47 48,89	3,000 3,032 2,960 2,074 3,012	-8,9466 8,8654 9,0668 9,0377 8,9318	+7,7118 7,6263 7,8165 7,7690 7,6512	+0,4771 ,4817 ,4713 ,4733 ,4788	+8,7651 8,4889 8,9812 8,9365 8,7291

ī		D - 1 - 1 - 1 - 1 - 1			Logarit	hma of		Differ	ence from th		Catalogue.
	No.	Declination. (South ) Jan. 1. 1840.	Annual Precession	<u>a'</u> -	— <u>Logan</u> , -	c'	$-\frac{1}{d'}$	No	Right As fro M.C.		Deolin.
64 64	2026 2027 2028 2029 2030	64 18 29,72 61 36 3,51 61 59 20,68 48 15 15,04 54 34 27,10	" 19,931 19,932 19,935 19,940 19,943	<u></u>	.+9,9074 ,9421 ,9437 ,8708 ,9091	—1,2995 ,2996 ,2996 ,2997 ,2998	-9,0180 ,0168 ,0107 ,0033 8,9945	3738 3739 3740 3743 3747	s. - 4,36 - 1,76 - 2,39 - 7,24 - 0,32	3. - 1,94 - 3,30	+ 4,21 + 2,83 + 4,41 + 4,71 - 0,80
1	2031 2032 2033 2034 2035	50 40 59,57 48 10 50,09 48 57 38,17 51 48 4,03 49 3 33,78	19,943 19,945 19,949 19,950 19,950	+9,5453 ,5587 ,5527 ,5353 ,5514	+9,8866 ,87 <b>0</b> 5 ,8757 8936 ,8763	1,2998 ,2998 ,2999 ,2999 	8,9945 ,9907 ,9803 ,9789 ,9789	3746 3748 3751 3752 3753	- 3,50 - 3,34 + 1,07 - 3,14 - 8,43		+ 3,42 + 7,95 -13,39 + 2,97 + 1,12
	2036 2037 2038 2039 2040	27 4 28,98 61 45 60 17 22,42 59 20 1,38 61 11 25,89	19,953 19,057 19,957 19,958 19,958	-+9,6314 ,4564 ,4683 ,4757 ,4609	+9,6566 ,9432 ,9371 ,9329 ,94 <b>0</b> 3	—1,3000 ,3001 ,3001 ,3001 ,3001	-8,9696 ,9628 ,9614 ,9614 ,9600	3758 3762 3763 3764 3765			+ 0,56 - 5,22 - 3,48 + 4,13
	2041 2042 2043 2044 2044 2045	39 37 49,46 61 24 25,36 30 21 58,67 56 48 20,52 34 19 58,81	19,958 19,958 19,962 19,963 19,967	+0,5933 ,4579 ,6221 ,4928 ,6085	+9,8032 ,9418 ,7025 ,9211 ,7500	-1,3001 ,3001 ,3002 ,3002 ,3003	—8,9587 ,9687 ,9489 ,9460 ,9345	3766 3767 3770 3771 3773	- 5,35 - 2,15 - 2,35	— <del>2,21</del>	+ 2,56 - 0,04 - 0,29 + 0,89 - 0,36
	2046 2047 2048 2049 2050	45 10 44,80	19,976 10,977 19,977 19,977 19,978	+9,5587 ,4829 ,4472 ,5587 ,4594	+9,8507 ,9214 ,9403 ,8497 ,9343	—1,3005 ,3005 ,3005 ,3005 ,3005	-8,9078 ,9042 ,9042 ,9010 ,8978	3789 3783 3784 3785 3786	$-\frac{2,52}{-1,52}$	- <del>2,57</del>	$ \begin{array}{r} -17,74 \\ + 0,23 \\ + 7,23 \\ - 3,66 \end{array} $
	2051 2052 2053 2054 2055	26 23 17,13 61 45 33,96	19,981 19,982 19,984 19,985 19,986	+9,5843 ,5224 ,6253 ,4330 ,4757	+9,8014 ,8882 ,6470 ,9438 ,9222	-1,3006 ,3006 ,3007 ,3007 ,3007	-8,8898 ,8865 ,8766 ,8732 ,8682	3793 3794 3795	$\begin{array}{c c} -2,58 \\ -2,65 \\ -2,54 \end{array}$		- 1,43 - 0,47 + 1,31 - 0,01 - 3,83
	2056 2057 2058 2059 2060	60 57 23,49 29 55 58,13 39 25 <b>0</b> ,89	19,989 19,990 19,991 19,992 19,994	+9,5635 ,4362 ,6138 ,5798 ,4955	+0,8331 ,9406 ,6974 ,8020 ,9044	-1,3008 ,3008 ,3008 ,3008 ,3009	8,8578 ,8543 ,8490 ,8472 ,8363	3799 3800 3802 3803 3804	$\begin{bmatrix} -0.11 \\ -2.44 \\ -2.40 \end{bmatrix}$		+ 5,34 - 3,09 - 6,93 + 0,81 + 0,09
	2061 2062 2063 2064 2064	56 5 55,96 50 25 27,69 1 56 31 10,46		+9,4683 ,4742 ,5159 ,4594 ,5821	+9,9222 ,9182 ,8860 ,9206 ,7775	-1;3009 ;3009 ;3009 ;3011 ;3012	—8,8326 ,8307 ,8289 ,7731 ,7645	3806 3806 3806 3816 3826	$\begin{bmatrix} -1,76 \\ -2,10 \\ -2,39 \end{bmatrix}$		+ 0,90
	2066 2066 2068 2069 2070	7 24 49 39,27 3 55 11 52,57 9 52 20 53,17	20,009 20,012	+9,5623 ,6212 ,4683 ,4885 ,5694	,6228 ,9137 ,8982	-1,3012 ,3012 ,3012 ,3013 ,3013	,7601 ,7490 ,73 <b>0</b> 7	382 382 382 383 383	$ \begin{array}{c cccc} 2 & - & 2,18 \\ 6 & - & 3,13 \\ 1 & - & 1,87 \end{array} $	3,33	-   - 7,36 + 1,49

No.	Names.	Mag. No.	Right Ascen.	Annual		Logari	thms of	
140	names.	Mag. Obs	Jan. 1, 1840.	Precesn.	a	Ь	d	d
2071 2072 2073 2074 2075	Centauri Hydræ Centauri	7 2 7 3 7,8 3 7.8 3	H. M. 8. 11 48 48 41,62 48 57,13 49 0,32 49 23,31	5, + 5,029 3,000 3,028 2,989 3,038	8,8922 8,9833 8,8971 9,0267 8,8705	+7,5815 ,6691 ,5734 ,7003 ,5276	+0,4813 ,4771 ,4812 ,4755 ,4826	-1-8,6090 8,8418 8,6268 8,9187 8,5152
2076 2077 2078 2079 2080		7.8 3 7.8 3 7.8 3 7.8 3	49 24,29 49 40,09 49 45,94 49 67,63 50 11,69	3,021 2,969 2,968 2,983 2,986	8,9248 9,1460 9,1101 9,0759 9,0698	十7,5819 ,7918 ,7621 ,7102 ,6922	+0,4801 ,4711 ,4724 ,4746 ,4751	4-8,7105 9,0902 9,0548 8,9045 8,9866
2081 2082 2083 2084 2085	Hydræ Centauri	7 9 7.8 3 3 7.8 3 3 7.8	50 14,04 50 84,60 50 46,96 51 5,54 51 13,73	3,021 3,000 3,043 3,006 3,040	8,9398 9,0332 8,8605 9,0232 8,8826	+7,5821 ,6371 ,4640 ,6044 ,4671	+0,4801 ,4771 ,4833 ,4780 ,4829	+8,7486 8,9202 8,4032 8,9126 8,6709
2086 2087 2088 2088 2089	Hydræ Centauri	7.8 3 7.8 3 7.8 2 8 3	51 19,67 51 23,83 51 22,64 51 27,69 51 37,03	2,094 3,034 2,976 3,018 2,986	-9,0794 8,9074 9,1615 8,9800   9,1238	-1-7,6472 ,4717 ,7158 ,5408 ,6741	+0,4762 ,4820 ,4736 ,4797 ,4751	+ 8,9095 8,6599 0,0973 8,8352 9,0610
2091 2092 2093 2094 2095	and the second s	7.8 3 7.8 3 7 8 8 7 8 8 7 8 8	52 2,28 52 40,63 53 22,68 53 35,16 53 38,87	3,024 3,021 3,011 3,036 3,044	8,9673 0,0041 0,0834 8,9457 8,9041	+7,4057 ,4074 ,5295 ,3781 ,3269	+0,4806 ,4801 ,4787 ,4893 ,4834	1 * + 8,8098 8,8799 9,0053 8,7624 8,0492
100	Crucie   Production	8 3 7.8 3 8 2 8 3 8 3	54 6,69 54 16,37 54 22,68 54 47,31 54 50,98	3,026 3,009 3,022 3,014 3,051	9,0312 9,1458 9,0729 9,1426 8,8900	+7,4214 ,5287 ,4452 ,4814 ,2230	+0,4809 ,4784 ,4803 ,4701 ,4844	4-8,9258 9,0899 8,9899 9,0867 8,5997
101 102 103 104 105		7 3 7.8 3 7 8 3 8 2	54 54 51,37 54 53,90 54 56,02 55 36,18	3,023 3,024 3,036 3,037 3,030	9,0924 9,0808 9,0060 8,9927 9,0864	+ 7,4254 - 2,4138 - 3321 - 3199 - 3563	-1-0,4804 -34800 -34823 -34894 -34814	+9,0170 9,0014 8,8813 8,8592 9,0004
106 1078 108 109 110	Cruoie Contauri	7.8 3 7 3 7.8 3 8 3	55 36,94 56 4,45 56 33,41 57 7,56 57 8,46	3,034 3,035 3,037 3,060 3,060	-9,0531 9,0820 9,1043 9,0104 8,0006	+7,3162 ,2939 ,25β3 ,0763 ,0634	+0,4820 ,4822 ,4824 ,4843 ,4843	9,0031 9,0031 9,0346 8,8908 8,8717
1-11 173 173 174 175	100 May 110 Ma	8   30	57 46,85 57 53,63 58 25,56 59 8,61 59 18,71	3,063 3,061 3,062 3,064 8,065	0,0485 8,8959 8,0215 8,9555 8,9723	+6,9893 ,8068 ,7075 ,4192 ,2811	+0,4846 ,4859 ,4860 ,4863 ,4864	+8,9531 8,6211 8,7010 8,7842 8,8190

Ī		Declination		····	Logarit	hms of		Differ		e Brisbane	Catalogue.
ļ	No.	(South.)	Annual Procession			c'				om l	Declin.
1.		Jan. 1. 1840.		a'	<i>b'</i>	<i>c</i> ′	d'	No.	M. C.	<del></del>	<u> </u>
	2071 2072 2073 2074 2075	31 22 ·46 10 55,40 32 25 28,97 51 12 30,29 26 9 43,43	20,018 20,018 20,019 20,019 20,020	+9,5966 ,5250 ,5922 ,4899 ,6117	+9,7163 ,8580 ,7291 ,8914 ,6442	-1,3014 ,3014 ,3014 ,3014 ,3015	8,6889 ,6863 ,6757 ,6731 ,6567	3836 3838 3839 3840 3843	- 2,51  - 2,91  - 2,90  - 2,81	- 2,49 - 3,29	+ 4,05 - 1,72 + 2,37 + 0,46
	2076 2077 2078 2079 2080	37 36 19,43 61 33 24,47 59 33 40,10 55 58 26,56 55 25 37,30	20,020 20,021 20,022 20,023 20,024	+ 9,5705 ,3892 ,4116 ,4456 ,4472	+9,7853 ,9438 ,9353 ,9182 ,9153	-1,3015 ,3015 ,3016 ,3015 ,3015	-8,6567 ,6454 ,6426 ,6338 ,6220	3844 3845 3846 3847 3849	2,38 2,20 2,34 3,70 1,69	- 3,58 - 1,29	+ 1,45 + 3,74 - 1,09 + 0,57 - 5,26
	2081 2082 2083 2084 2085	40 3 30,18 51 52 35,97 25 1 5,54 50 48 21,46 29 10 10,02	20,024 20,025 20,025 20,027 20,027	+9,5551 ,4771 ,6128 ,4814 ,5988	+9,8084 ,8956 ,6264 ,8892 ,6880	-1,3015 ,3016 ,3016 ,3016	-8,6220 ,6035 ,5971 ,5809 ,5743	3850 3852 3853 3856 3858	-0.69 $-2.07$	$-\frac{3,56}{2,82}$	- 6,94 + 2,88 - 2,87 - 1,58 + 1,68
	2086 2087 2088 2089 2090	56 16 34,82 34 25 3,58 61 56 22,44 45 44 29,66 59 54 46,62	20,027 20,028 20,028 20,028 20,029	+9,4346 ,5786 ,3729 ,5172 ,3944	+9,9198 ,7623 ,9456 ,8549 ,9370	-1,3016 ,3016 ,3016 ,3016 ,3016	8,5674 ,5640 ,5640 ,5605 ,5500	3859 3860 3861 3862 3864	- 2,75 - 0,86 - 3,46 - 1,01		- 2,62 + 10,44 + 0,08 + 1,97 - 5,60
	2091 2092 2093 2094 2095	48 58 8,37 48 40 35,14 56 36 41,33 40 56 14,46 89 45 36,60	20,030 20,031 20,033 20,034 20,034	+9,5263 ,4899 ,4183 ,5391 ,5752	+9,8422 ,8756 ,9216 ,8165 ,7450	-1,3017 ,3017 ,3017 ,3018 ,3018	-8,5281 ,4930 ,4459 ,4322 ,4227	3869 3878 3874 3875 3876	2,45 2,24 - 2,25 - 2,65 - 2,89		+5,7,76 +10,03 - 1,53 + 1,06 + 2,92
	2096 2097 2098 2099 2100		20,035 20,035 20,036 20,036 20,036	+9,4594 ,3579 ,4216 ,3560 ,5843	+9,8944 ,9440 ,9169 ,9430 ,7096	-1,3018 ,3018 ,3018 ,3018 ,3018	,3722	3879 3880 3882 3887 3888	$\begin{array}{c c} -1,41 \\ -2,74 \\ -2,15 \\ -2,72 \\ -1,85 \end{array}$		- 0,23 + 3,78 - 6,16 - 1,36 - 6,83
	2101 2102 2103 2104 2105	56 22 8,36 48 45 41,66 47 18 11,50	20,036	+9,4014 ,4116 ,4800 ,4914 ,4031	+9,9254  ,9205  ,8762  ,8664  ,9229	-1,3018 ,3018 ,3018 ,3018 ,3018	8,3329 ,3329 ,3270 ,3270 ,2699	3890 3891 3893	<b>  — 2,06</b>	1.0 1.0 1.0 1.0 1.0	- 1,61 - 3,30 + 0,96 + 4,04
	2106 2107 2108 2109 2110	56 28 20,75 58 21 39,48 49 22 44,93	20,038 20,039 20,040	+9,4330 ,4048 ,3802 ,4639 ,4742	+9,9071   ,9210   ,9302   ,8804   ,8721	-1,3018 ,3019 ,3019 ,3019 ,3019	,0658	3897 3900 3903 3910 3911	3,87	<b>- 2,77</b>	+ 2,63 - 0,26 + 2,53 + 3,38 + 3,44
	2111 2112 2113 2114 2116	32 3 39,15 36 58 7,22 4 <b>2 21 20</b> ,09	20,041 20,041 20,041	+9,4249 ,5705 ,5453 ,5092 ,4899	8287	,3019 ,3019	,4637	3916 3918 3922 3925 3926	2,37 4,22		+ 1,57 - 0,82 - 3,08 + 0,36 - 3,49

No.	Names	No No	Right Ascen.	Annual		Logari	thms of	
10.	ivatiles	Mag. Ob		Precesn.	a	<i>b</i>	1 C	d
2119	Centauri E Crucis c Centauri	7.8 3 6 3 7 3 7.8 2 5 3	59 49,72 59 59,36 12 0 5,86	3,067 3,068 3,069 3,071 3,070	9,0149 9,0140 8,9970 9,1247 9,0146	4-5,9558 5,4778 5,9378 6,1905 6,1773	+0,4867 ,4869 ,4870 ,4873 ,4871	4-8,8986 8,8970 8,8669 9,0622 8,8980
2121 2122 2123 2124 2125	Crucis Centauri	7.8 2 6 2 6 3 6 2 6.7 3	0 7,17 0 38,82 0 39,58 1 28,88 2 17,18	3,073 3,077 3,072 3,080 3,079	9,1247 8,9631 8,9420 9,0242 8,9215	6,4915 ,5408 ,5197 ,8682 ,9661	-1-0,4876 ,4881 ,4874 ,4885 ,4884	+9,0622 8,8006 8,7584 8,9142 8,7010
2126 2127 2128 2129 2130	Centauri Hydræ Centauri Crucis Centauri	8   3 7   3 7   7 7   3 6   3	2 20,84 2 37,76 2 45,20 2 45,13 3 8,37	3,079 3,076 3,085 3,098 3,087	8,9157 8,8748 8,9701 9,1304 8,0627	6,9503 6,9720 7,0783 7,2376 7,1254	+0,4884 ,4880 ,4893 ,4011 ,4895	-1-8,6846 8,6348 8,8173 9,0698 8,7998
2131 2132 2133 2134 2136	Centauri Crucis Contauri	7.8 3 7.8 3 8 3 7.8 3	4 2,80 4 27,60 4 30,27	3,092 3,109 3,112 3,088 3,092	-9,0203 9,1145 9,1093 8,0196 8,9276	7,2001 ,3845 ,4181 ,2346 ,2945	,4902 ,4926 ,4930 ,4897 ,4902	-1-8,9078 9,0485 9,0414 8,6957 8,7176
2136 2137 2138 2139 2140	Hydræ Centauri Crucis Centauri	8 3 7.8 3 7.8 3 7.8 3 7.8 3	5 48,11 5 51,55	3,084 3,115 3,124 3,115 3,102	9,0611 9,0997 9,0448 8,9412	7,2651 ,4044 ,5178 ,4677 ,4220	-1-0,4891 ,4936 ,4947 ,4936 ,4916	7-8,5209 8,9724 9,0282 8,9474 8,7516
2141 2142 2143 2144 2144	Hydra Centauri Crucis	7 3 7 3 7 3 7.8 3 7.8 3	7 14,27 7 29,84 9 10,74	3,090 3,105 3,127 3,129 3,164	8,8793 8,9462 9,0462 8,9987 9,0872	7,8643 ,4693 ,6708 ,6119 ,7090	+0,4900 ,4921 ,4951 ,4954 ,4989	1-8,5561 8,7636 8,9491 8,8704 9,0107
2146 2147 2148 2149 2150	Centauri Crucis Centauri	7 3 8 3 7.8 3 7 3 7.8 3	9 32,93 9 43,17 10 29,77	3,107 3,169 3,140 3,155 3,109	-8,9114 9,1325 9,0289 9,0672 8,8937	-7,5367 ,7638 ,6661 ,7280 ,5908	+0,4023 ,5009 ,4969 ,4990 ,4926	4-8,6725 9,0726 8,9221 8,9667 8,6146
2151 2152 2153 2154 2155	Crucis Centauri Hydræ Crucis	8 3 7 8 2 7.8 3	11 44,20	3,194 3,120 3,146 3,105 3,206	-9,1518 8,9206 8,9862 8,8728 9,1434	-7,8514 ,0376 ,7292 ,6203 ,8931	-+0,5043 ,4041 ,4978 ,4021 ,6060	+9,0977 8,6004 8,8476 8,5279 9,0869
2156 2157 2158 2159 2160	Crucis	7 3 3 3 3 4 6 3 3 4 5 6 3 5 6 5 6 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7	12 41,00 13 17,13 13 14 11,96	3,134 3,150 3,183 3,196 3,201	-8,9501 9,0069 9,0702 9,0848 9,0844	7,6998 ,7787 ,8441 ,8816 ,8989	+0,4961 ,4905 ,5028 ,6046 ,5053	+8,7731 8,8853 8,9863 9,0075 9,0069

	Declination.			Logarit	hms of		Diffe		he Brisbane scension	Catalogue.
No.	(South.) Jan. 1. 1840.	Annual Procession	a'	b'	c'	$\frac{1}{d'}$	No.	from M.C.	om ! <b>T</b> .	Deolin.
2116 2117 2118 2119 2120	49 52 22,69 49 46 13,26 47 48 0,78 59 57 24,44	-20,041 20,041 20,041 20,041 20,041 20,041	+9,4472 ,4472 ,4639 ,3344 ,4455	4-9,8836 ,8830 ,8699 ,9375 ,8834	-1,3019 ,3019 ,3019 ,3019 ,3019	6,9408 +-6,4637 6,9408 7,0658 7,1627	3928 3930 3932 3933 3934	s. -16,84 - 2,49 - 0,82 - 3,57 - 2,82	$ \begin{array}{r}                                     $	- 1,94 + 0,69 + 3,67 - 1,49 - 1,69
2121 2122 2123 2124 2126	59 57 25,54 43 25 56,22 40 20 27,36 50 53 34,85	20,041 20,041 20,041 20,041 20,040	+9,3324 ,4983 ,5172 ,4297 ,5315	+9,9375 ,8375 ,8114 ,8900 ,7794	—1,3019 ,3019 ,3019 ,3019 ,3019	+7,3668 7,5777 7,5777 7,8439 8,0435		+ 7,54 - 2,92 - 2,54 - 8,59 - 2,28	$-\frac{3,74}{2,41}$	$ \begin{array}{c c} -0.19 \\ +2.23 \\ -2.51 \\ +6.70 \\ +1.74 \end{array} $
2126 2127 2128 2128 2136	27 10 34,51 3 44 31 56,75 60 23 10,23	20,040 20,040 20,039 20,039 20,039	+9,5378 ,6798 ,4471 ,3075 ,4843	+9,7688 ,6600 ,8461 ,9393 ,8371	-1,3019 ,3019 ,3019 ,3019 ,3019	+8,0436 ,0972 ,1072 ,1072 ,1627	3946 3947 3948 3949 3961	- 2,22 - 1,66 - 2,39 - 2,04 - 2,68		+ 1,56 + 3,26 + 0,29 + 0,81 + 4,35
213 2133 2133 2134 2134	59 10 36,23 58 45 49,32 1 36 38 10,54	20,039 20,037 20,037 20,037 20,036	+9,4233 ,3139 ,3181 ,5250 ,5159	+9,8874 ,9339 ,9320 ,7760 ,7890	1,3019 ,3018 ,3018 ,3018 ,3018	+8,1797 ,2699 ,3088 ,3149 ,3608	3952 3957 3960 3961 3963	$\begin{array}{r} + & 2,16 \\ - & 2,97 \\ - & 2,07 \\ - & 0,81 \\ - & 2,91 \end{array}$	+ 1,59 - 3,36	- 2,23 - 1,88 + 0,63 - 2,83 + 1,95
2130 213 213 213 214	7 54 35 29,94 8 67 59 8,42 9 53 1 54,29	20,035 20,035 20,034 20,034 20,032	+9,5775 ,3636 ,3181 ,3802 ,4941	+9,6489 ,9112 ,9283 ,9025 ,8103	-1,3018 ,3018 ,3018 ,3018 ,3017	4-8,3931 ,4032, ,4179 ,4227 ,4807	3964 3966 3970 3971 3976	- 1,41 - 3,29 - 2,90 - 1,20 + 0,36	2,88	+13,51 - 4,04 - 3,33 - 5,91 - 3,34
214 214 214 214 214 214	2 41 0 54,09 3 53 9 54,16 4 48 1 57,56	20,032 20,030 20,030 20,024 20,024	4-9,5658 ,4857 ,3674 ,4150 ,3032	+9,6766 ,8171 ,9032 ,8713 ,9231	-1,3017 ,3017 ,3017 ,3016 ,3016	+8,4818 ,5129 ,5343 ,6128 ,6220	3977 3979 3981 3987 3989	$ \begin{array}{r} -0,69 \\ -1,19 \\ -3,27 \\ -2,31 \\ -3,01 \end{array} $		+ 2,76 - 3,15 + 4,78 +61,39 - 3,01
214 214 214 214 214 215	7 60 34 47,95 8 51 24 59,75 9 54 15 10,10	20,023 20,023 20,022 20,019 20,016	+9,5185 ,2455 ,3747 ,3624 ,5353	+9,7607 ,9397 ,8928 ,9090 ,7204	1,3015 ,3015 ,3015 ,3014 ,3014	+8,6250 ,6309 ,6368 - ,6704 ,6965	3990 3991 3992 3995 3997	-2,85 $-3,00$	$-\frac{2,52}{-2,39}$	$ \begin{array}{r} - 4,49 \\ - 0,62 \\ + 1,18 \\ - 3,51 \\ - 3,07 \end{array} $
215 216 216 216 216	52 36 53 28,82 53 46 33 56,86 54 26 49	20,011	+9,2041 ,4997 ,4116 ,5687 ,2014	+9,9454 ,7788 ,8606 ,6544 ,9429	-1,3014 ,3013 ,3013 ,3012 ,3012	-1-8,6991 ,7164 ,7494 ,7468 ,7490	4011		1,79	$ \begin{array}{r} -1,40 \\ -0,90 \\ -0,21 \\ +0,69 \end{array} $
216 216 216 216	57   49 3 35,21 58 35 25 59 56 47 12,93	20,006 20,006	+9,4579 ,3802 ,2967 ,2695 ,2648	+9,8223 ,8776 ,9163 ,9218 ,9216	-1,3012 ,3012 ,3011 ,3011 ,3010	,7710 ,7731 ,7979	4020 4023	$-\frac{3,06}{2,53}$		+ 2,12 + 5,71 + 0,31

,	1 -		No.	Right Ascen.	Annual		Logarit	mis of	
No	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	6	C	Cl
2161 2162 2163 2164 2165	Crucis Centauri Hydræ	7 8 7 6,7	3 6 2 3	u, M. 8. 12 14 53,98 14 58,37 15 10,94 16 19,68 16 25,60	s. +3,226 3,144 5,139 3,138 3,119	—9,1342 8,9451 8,9291 8,9267 8,8831	-7,9546 ,7674 ,7571 ,7581 ,7167	-1-0,5085 ,4975 ,4968 ,4966 ,4940	+ 9,0760 8,7610 8,7228 8,7165 8,5740
2166 2167 2168 2169 2170	Centauri Crucis Centauri	7.8  7.8 7 6.7	3 3 3	15 50,48 15 16 35,83 16 42,21 17 55,55	3,166 3,211 3,175 3,155 3,196	8,9852 9,0840 8,9926 8,9493 9,0198	-7,8316 ,9323 ,8603 ,8180 ,9190	4-0,5005 ,5060 ,5017 ,4990 ,5046	+ 8,8458 9,0064 8,8599 8,7718 8,9077
2171 2172 2173 2174 2175	Contauri Crucis	7.8 7.8 7.8 7 7.8	3 3 3 3	18 22,13 18 23,05 18 35,08 18 43,78 19 23,93	3,206 3,188 3,221 3,241 3,273	9,0317 8,9974 9,0627 9,0916 11 9,1354	-7,9420 7,9077 7,9791 8,0096 8,0685	+0,5060 ,5035 ,5080 ,5107 ,5140	4-8,9273 8,8688 8,9754 9,0174 9,0768
2176 2177 2178 2179 2180	Centauri Crucis Centauri Virginis Crucis	5.6 7.8 7.8 7.8	3 3 2 3	19 25,66 19 34,52 19 19 43,22 19 53,14	3,201 3,275 3,174 3,083 3,239	-9,0086 9,1358 8,9592 8,8963 9,0695	-7,9417 8,0784 7,8923 7,7663 8,0143	+0,5053 ,5162 ,5016 ,4890 ,5104	1-8,8888 9,0773 8,7876 7,9599 8,9856
2181 2182 2183 2184 2184	Crucis	8 7.8 8.9 7	33323	20 2,67 20 21,96 20 40,74 20 54,83 21 7,45	3,281 3,210 3,149 3,266 3,250	9,1369 9,0121 8,9034 9,0909 9,0707	8,0846 7,9670 7,8639 8,0659 8,0409	+0,5160 ,5065 ,4982 ,5140 ,5119	+ 9,0788 8,8950 8,0508 9,0291 8,0876
2186 2187 2188 2189 2190	Crucis Centauri Muscac	6.7 7 7.8 7	3 3 3	21 25,43 21 26,20 21 27,67 21 22 47,06	3,177 3,288 3,182 3,294 3,288	8,9434 9,1248 8,9513 9,1209 9,1044	-7,9203 8,1017 7,9282 8,1149 8,1087	+0,5020 ,5160 ,5027 ,5177 ,5169	-1-8,7 £93 9,0629 8,777-1 9,0577 9,0355
2191 2192 2193 2194 2195	Crucis	7.8 7.8 7.8 7.8	2	22 46,11 23 4,74 23 23 20,49 23 25,23	3,183 3,279 3,264 3,265 3,184	8,9416 9,0906 9,0650 9,0669 8,9386	-7,9447 8,0999 8,0756 8,0790 7,9541		-j-8,7555 9,0163 8,9794 8,9807 8,7485
2196 2197 2198 2199 2200	Crucis Centanri	7.8 7.8 8 8 7.8	3 3	24 27,68 24 31,07 24 31,54	3,288 3,288	8,8706 9,0897 9,0115 9,0536 8,9406	8,0463 8,0883	,6141	-{-8,5234 9,0067 8,8945 8,9622 8,7536
2200 2200 2200 2200 2200	Crucis	8 5.6 7 7	2 3 3	26 4,86 26 26,58	3,214 3,346	9,0655 8,9627 9,1338 9,1351 8,9406	,0238 ,2016 ,2040	,6070 ,5215 ,5248	+8,9803 8,8028 9,0751 9,0769 8,7541

				Logaritl	me of		Differ	ence from th		Cataloguo.
No.	Declination (South.) Jan. 1, 1840.	Annual Precession	a'		c'		No.	Right A fro M. C.	om	Declin.
2161 2162 2168 2164 2164	60 44 27,23 40 57 30,42 38 24 46,77 38 1 22,52 20 26 49,74	19,998 19,997 19,996 19,996 19,994	,4548 ,4757	+9,9399 ,8168 ,7927 ,7888 ,6909	1,3010 ,3010 ,3010 ,3009 ,3009	+8,8194 ,8213 ,8270 ,8307 ,8326	4030 4033 4034 4036 4038	- 2,31 - 2,16 - 2,53 - 3,06 - 1,60	s	+ 1,14 - 2,04 + 5,70 - 5,07 - 1,29
2166 2167 2168 2169 2170	46 29 5,34 56 45 47 25 16,24 41 37 30,82 50 33 48,79	19,992 19,992 19,987 19,986 19,979	+9,3962 ,2553 ,3784 ,4393 ,3324	+9,8596 ,9214 ,8661 ,8214 ,8866	—1,3008 ,3008 ,3007 ,3007 ,3006	+ 8,8454 ,8472 ,8664 ,8682 ,8978	4039 4040 4044 4045 4052	$ \begin{array}{r} -2,71 \\ -0,88 \\ -2,85 \\ -3,04 \end{array} $	3,25	+ 0,67 + 4,61 + 0,91 - 4,06
2171 2172 2173 2174 2175	54 60 56,55 57 25 49,75	19,976 19,976 19,976 19,973 19,968	+9,3117 ,3617 ,2648 ,2148 ,1367	+9,8942 ,8700 ,9113 ,9243 ,9398	—1,3005 ,3005 ,3005 ,3004 ,3003	+8,9088 ,9088 ,9150 ,9166 ,9316	4054 4055 4058 4059 4060	1	2,09	- 0,66 + 3,86 + 0,29 - 2,11 - 9,52
2176 2177 2178 2179 2180	60 54 30,93 42 41 7 47 22,44	10,968 19,967 19,967 19,965 19,964	+9,3404 ,1335 ,4166 ,6222 ,2405	+9,8786 ,9399 ,8299 ,1319 ,9146	1,3003 ,3003 ,3003 ,3003 ,3002	+8,9315 ,9359 ,9345 ,9388 ,9432	4062 4064 4065 4066 4067	$ \begin{array}{c c} - 3,34 \\ - 3,75 \\ - 1,54 \\ - 1,43 \end{array} $	- 3,83 	$\begin{array}{c c} + 4,15 \\ - 1,88 \\ - 0,40 \\ - 8,20 \end{array}$
2181 2182 2183 2184 2186	33 56 47,93 58 8 10,37	19,963 19,960 19,958 19,956	,3263 ,4914 ,1791	+9,9402 ,8811 ,7456 ,9274 ,9150	1,3002 ,3002 ,3001 ,3001 ,3000	+8,9460 ,9531 ,9587 ,9642 ,9682	4069 4070 4071 4072 4073	-1,39 $-1,85$ $-1,42$	Description (10)	- 0,26 - 2,61 + 3,70 + 6,13 - 2,48
2186 2187 2188 2188 2190	60 6 17,90 42 2 36,07 69 48	19,952 19,944	,1303 ,4133 ,1238	+9,8140 ,9362 ,8241 ,9348 ,9289	-1,3000 ,3000 ,3000 ,2998 ,2997	,9750 ,9919	407 <i>5</i> 4078 4079	$\begin{bmatrix} -2,22 \\ -3,66 \\ \hline \end{bmatrix}$	$-\frac{3,91}{-\frac{1,25}{1,25}}$	
219 219 219 219 219	2 57 24 20,95 3 55 9 4 55 14 48,01	19,937 19,936 19,935	3 ,2175 5 ,2122	+9,8117 ,9234 ,9121 ,9126 ,8076	,2997 , <b>2</b> 997	,0083	4087 4088 4090	$\frac{2,85}{2,70}$		$ \begin{array}{c c} + 7,15 \\ - 1,40 \\ - 7,69 \\ - 6,71 \end{array} $
219 219 219 219 220	7 66 49 55,16 8 49 46 6,54 9 54 5 46,88	19,928 1 19,928 3 1 19,924	,1703 ,2967 ,2227	+9,6504 ,9204 ,8804 ,9062 ,8104	,2994 , <b>2</b> 994 ,2994	,0311 ,0323 ,0323	4096 4096 4098	$ \begin{array}{c c}  & -3,24 \\  & -2,23 \\  & -1,56 \\  & -2,10 \end{array} $		+ 1,92 - 2,99 - 2,09 + 3,37 + 1,21
220 220 220 220 220	2 43 46 44,49 3 60 51 24,01 4 60 57 15,39	)   19,910   19,900	3692 3 ,0414 4 ,0374	,938R	,2990 ,2990	,0648 ,0659	4100 4100 4100 4100 4111	$\begin{array}{c c} 3,35 \\ -2,80 \\ -2,79 \end{array}$	3,97	+ 0,49 + 1,85 - 2,83 + 1,89

No.	Names.	Mag. N		Annual		Logari	thms of	
		Imag. OI	os. Jan. 1, 1840.	Precesn.	а	b	c	
2266 2207 2208 2209 2210	Centauri Crucis	7 7 8	H. M. S. 12 27 23,54 3 28 0,07 3 28 2,83 3 28 35,11 28 62,20	**************************************	-9,0272 9,0079 8,9268 9,0871 9,0845	-8,1101 ,1002 ,0201 ,1886 ,1900	+0,5145 ,5132 ,5049 ,5292 ,5222	+8,9212 . 8,8889 8,7207 9,0118 9,0082
2211 2212 2213 2214 2215	Crucis Centauri Hydrm	8.9 7.8	3 29 11,30 3 29 32,39 3 30 4,82 - 30 2 30 55,04	3,312 3,249 3,208 3,170 3,166	-9,0626 8,9806 8,9268 8,8806 8,8767	8,1732 ,0961 ,0501 ,0116 ,0125	+0,5190 ,5117 ,5062 ,5011 ,5005	* - 8,9764 8,8394 8,7212 8,5738 8,5580
2216 2217 2218 2219 2220	Centauri Hydræ Crucis Centauri	7.8	3 32 26,93 32 44,95 32 47,62 32 33 6,94	3,246 3,167 3,385 5,387 3,334	-8,9571 8,8697 9,2054 9,1054 9,0492	8,1140 ,0302 ,2677 ,2694 ,2150	+0,5113 ,5006 ,5296 ,5298 ,5280	4-8,7929 8,5275 9,0577 9,0377 8,9567
2221 2222 2223 2224 2225	Centauri Crucis Centauri	7.8 7.8 7.8 5.6 6.7	3 6,95 3 14,92 3 33 9,74 3 33 46,12 3 33 47,38	3,275 3,407 3,336 3,287 3,351	-8,9834 9,1225 9,0466 8,9933 9,0616	8,1510 ,2900 ,2194 ,1678 ,2361	+0,5152 ,5324 ,5232 ,5168 ,5252	+8,8458 9,0607 8,9528 8,8642 8,9755
2226 2227 2228 2229 2230	Centauri	6.7	2 34 5,90 3 31 19,78 2 34 44,43 3 35 12,23 3 36 20,69	3,356 3,390 3,233 3,223 3,215	-9,0639 9,0963 8,9306 8,9154 8,9080	-8,2427 ,3775 ,1177 ,1102 ,1027	+0,5258 ,6302 ,5096 ,5083 ,5072	+8,9789 9,0240 8,7325 8,6934 8,6719
2231 2232 2233 2234 2235	Crucis Centauri Crucis	7.8 7.8 8 7.8 6.7	3 35 27,89 3 35 39,30 2 35 52,30 3 35 62,05 3 36 17,24	3,380 3,347 3,334 3,419 3,437	-9,0760 9,0415 9,0282 9,1094 9,1212	-8,2716 ,2395 ,2870 ,3099 ,3274	+0,5289 ,5247 ,5230 ,5339 ,6362	+8,0967 8,9461 8,9242 9,0435 9,0593
2236 2237 2238 2239 2240	Crucis	7.8 6.7 8.9 7.8 8	37 14,18 3 37 50,19 3 38 15,52 3 38 43,69	3,362 3,386 3,300 3,443 3,441	-9,0465 9,0664 8,9795 9,1089 9,1030	8,2607 ,2838 ,2039 ,3379 ,3374	+0,5266 ,5297 ,5185 ,5369 ,5367	+8,9532 8,9831 8,8396 9,0430 9,0551
2241 2242 2243 2244 2246	Centauri Hydræ Centauri Muscae	7.8 6.7 7 7.8 7.8	3 39 25,69 3 39 56,35 3 40 34,16 3 40 35,89 40 43,03	3,289 3,186 8,376 3,266 3,511	-8,9595 8,8664 9,0327 8,9323 9,1425	-8,2021 ,1142 ,2878 ,1874 ,3990	+0,5171 ,5031 ,5284 ,5140 ,5454	+8,8002 8,5197 8,9323 8,7398 9,0876
2246 2247 2248 2249 2250	Crucis Gentauri Grucis	7.8	3 40 47,58 3 41 21,48 41 29,85 41 41 52,43	3,473 3,444 3,922 3,487 3,482	-9,1121 9,0843 8,9779 9,1145 9,1108	8,3701 ,3480 ,2431 ,3839 ,3802	+0,6407 ,6371 ,6214 ,5424 ,5418	+9,0476 9,0095 8,8376 9,0510 9,0461

Ī	No.	Declination. (South.)	Annual		Logarit	lıms of		Diffe	rence from the Right A		Catalogue.
	A11//	Jan. 1. 1840.	Precession	a'	<i>b'</i>	c'	d'	No.	fro M.C.		Declin.
-	2206 2207 2208 2209 2210	51 32 3,95 49 27 7,85 38 26 35,52 56 12 24,61 56 59 3,48	-19,896 19,890 19,889 19,884 19,880	+9,2455 ,2765 ,4216 ,1139 ,1139	+9,8908 ,8776 ,7905 ,9213 ,9202	—1,2988 ,2986 ,2986 ,2985 ,2984	+9,0797 ,0890 ,0900 ,0981 ,1020	4112 4114 4115 4117 4118	$ \begin{vmatrix}  & s. \\  & 2,53 \\  & 3,54 \\  & 2,61 \\  & 1,74 \\  & 2,72 \end{vmatrix} $		+ 2,94 + 3,34 + 1,56 - 9,82 - 7,42
	2211 2212 2213 2214 2215	55 3 2,11 46 13 59,47 38 30 38,16 29 32 28 39 18,05	19,877 19,872 19,860 19,861 19,867	+9,1553 ,3160 ,4099 ,4938 ,4997	+9,9102 ,8652 ,7907 ,6893 ,6772	—1,2983 ,2982 ,2981 ,2980 ,2979	+9,1070 ,1118 ,1195 ,1271 ,1317	4129 4127 4130 4133 4134	- 2,48 - 2,50 - 2,17 - 1,50		$ \begin{array}{c c} -11,41 \\ +8,27 \\ +1,49 \\ +9,25 \end{array} $
	2216 2217 2218 2219 2220	43 13 14,74 27 1 41,78 58 48 17,72 58 48 53 52 53,62	19,838 19,834 19,833 19,831 19,830	+9,3404 ,5079 ,0086 ,0086 ,1430	+9,8314 ,6533 ,9278 ,9277 ,9029	-1,2975 ,2974 ,2974 ,2973 ,2973	+9,1524 ,1660 ,1677 ,1594 ,1612	4144 4149 4148 4152 4153	2,15 2,81 2,68 3,04	<u>- 2,29</u>	+ 2,80 - 2,60 + 5,06 - 0,80
	2221 2222 2223 2224 2225	46 43 35,03 60 8 23,26 53 39 32,26 47 55 55,65 55 4 7,78	19,827 19,827 19,821 19,821 19,821	+9,2810 8,9642 9,1399 9,2577 9,1038	+9,8677 ,9336 ,9014 ,8660 ,9091	—1,2973 ,2973 ,2972 ,2971 ,2971	+9,1629 ,1629 ,1680 ,1697 ,1697	4155 4154 4158 4161 4160	+ 3,99 - 2,33 - 4,31 - 1,72 - 2,73	- 2,36 - 1,34	+ 2,58 + 5,05 - 0,23 + 2,45 - 4,29
	2220 2227 2228 2229 2230	55 17 54,11 58 1 23,42 39 17 55,45 36 49 14,14 35 28 20,18	19,817 19,813 19,813 19,802 19,801	+9,0934 ,0086 ,3820 ,4065 ,4216	+9,9101 ,9237 ,7970 ,7727 ,7587	—1,2970 ,2969 ,2969 ,2967 ,2967	+9,1739 ,1772 ,1822 ,1895 ,1896	4163 4164 4165 4167 4169	$ \begin{array}{c c} - & 2,77 \\ - & 2,32 \\ \hline - & 1,78 \end{array} $	<u>- 2,30</u>	- 6,37 + 3,88 - 2,04 - 4,92 - 5,39
	2231 2232 2233 2234 2235	56 24 29,65 53 12 26,08 51 52 41,28 59 11 42,57 60 6 7,15	19,799 19,796 19,794 19,793 19,787	+9,0463 9,1303 9,1614 8,9395 8,8921	+9,9155 ,8983 ,8906 ,9286 ,9326	-1,2966 ,2966 ,2965 ,2965 ,2964	+9,1903 ,1927 ,1943 ,1951 ,2007	4171 4173 4175 4176 4178	- 7,65 - 2,55	— 3,15	+ 1,32 + 0,76 + 3,43 + 6,03 - 2,03
	2236 2237 2238 2239 2240	59 12 18,52	19,778 19,774 19,766 19,759 19,753	+9,1038 9,0453 9,2528 8,8921 8,9931	+9,9009 ,9109 ,8541 ,9280 ,9258	-1,2962 ,2961 ,2959 ,2958 ,2950	+9,2084 ,2115 ,2184 ,2229 ,2280	4180 4182 4185 4186 4192	_ 2,36	<u>- 2,20</u>	+ 3,08 - 1,98 - 1,24 - 4,13 + 1,59,40
	2241 2242 2243 2244 2245	39 54 11,22	19,752 19,754 19,725 19,725 19,722	+9,2878 9,4914 9,0934 9,3404 8,6812	+9,8342 ,6467 ,8926 ,8005 ,9382	-1,2954 ,2952 ,2950 ,2950 ,2950	+9,2361 ,2411 ,2482 ,2482 ,2496	4196 4198 4201 4202 4203	- 1,64 - 2,49		+ 6,13 - 0,37 - 2,06 - 3,14 + 2,69
	2246 2247 2248 2249 2250	57 17 40,33 46 20 51,08 59 47	19,720 19,712 19,710 19,704 19,703	+8,8195 8,9138 9,2263 8,7781 8,7993	+9,9285 ,9179 ,8525 ,9291 ,9279	—1,2949 ,2947 ,2947 ,2945 ,2946	+9,2510 ,2565 ,2579 ,2620 ,2620	4204 4206 4207 4208 4209	$ \begin{array}{c c} - 2,07 \\ - 1,06 \\ - 2,89 \\ \hline - 2,54 \end{array} $		- 0,58 - 0,08 + 3,97 + 0,27

{			No.	Right Ascen.	Annual		Logarit	hms of	
No.	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	b	c	d
2251 2252 2253 2254 2255	Centauri	7 7 7 6.7 8	3 3 3 3 3	11. M S. 12 41 51,66 43 6,72 43 9,77 43 25,91 43 40,62	,s + 3,379 3,340 3,970 3,191 3,390	-9,0266 8,9844 8,9246 8,8620 9,0235	8,2959 ,2662 ,2071 ,1466 ,3115	+0,5288 ,5237 ,5145 ,5039	+8,9227 8,8502 8,7219 8,5023 8,9181
2256 2257 2258 2259 2260	Centauri Crucis Centauri Crucis	7 8 7.8 6 - 7	3 1 3 2	48 51,57 43 53,83 43 53,09 44 5,97 44 9,15	3,421 3,506 3,502 3,354 3,495	-9,0477 9,1138 9,1101 8,9911 9,1104	8,3370 ,4031 ,4001 ,2831 ,4038	+0,5341 ,5448 ,5443 ,5256 ,5434	+8,9562 9,0503 9,0464 8,8628 9,0468
2261 2262 2263 2264 2264	Crucis Contauri Crucis	7 8.9 8 7	3 3 3	44 19,46 44 44 30,62 44 41,24 44 57,47	3,507 3,513 3,508 3,508 3,804 3,479	-9,1106 9,1136 9,1099 8,9460 9,0862	8,4053 ,4096 ,4059 ,2440 ,3856	+0,5449 ,5457 ,5451 ,5190	+9,0461 9,0501 9,0451 8,7786 9,0127
2266 2267 2268 2269 2270	Centauri	8 6.7 6.7 7	333.03	45 4,97 45 14,95 45 16,24 46 5,62 46 34,93	3,387 3,463 3,463 3,321 3,470	-9,0120 9,0716 9,0715 8,9530 9,0672	—8,3139 ,3748 ,3748 ,2647 ,3834	+0,5298 ,5394 ,5394 ,5213 ,5403	+8,8995 8,9918 8,9918 8,7892 8,9868
2271 2272 2273 2274 2275	Centauri ————————————————————————————————————	10 10 7 7	1 3 3 1	46 58,92 47 22,13 47 36,80 47 54,14 47 54,59	3,454 3,460 3,363 3,404 3,202	-0,0530 9,0552 8,9794 9,0094 8,8592	—8,3729 ,3783 ,3050 ,3381 ,1885	+0,5383 ,5391 ,5267 ,5320 ,5054	+8,9648 8,9682 8,8425 8,8958 8,4951
2276 2277 2278 2279 2280	Centauri	7 7.8 7 8 7	2 3 2 3 2	48 51,59 49 7,43 49 10,91 49 14,13 49 53,27	3,449 3,366 3,292 3,417 3,274	-9,0380 8,9738 8,9177 9,0117 8,9024	-8,3753 ,3142 ,2580 ,3527 ,2494	+0,5377 ,5271 ,5175 ,5336 ,5151	+8,9423 8,8324 8,7078 8,9002 8,6657
2281 2282 2283 2284 2284 2285	Centauri	7 8	3 - 1	50 1,87 50 50 50 23,40	3,297 3,487 3,551 3,488 3,566	-8,9184 9,0554 9,0982 9,0555 9,1082	-8,2666 ,4065 ,4499 ,4072 ,4599	+0,5181 ,5424 ,5503 ,6426 ,6522	+8,7103 8,9691 9,0301 8,9693 9,0436
2286 2287 2288 2289 2290	Centauri	8 7 7 8	2 2 2 3 3	50 32,06 51 4,22 51 7,94 51 14,54 53 3,38	3,465 3,322 3,395 3,279 3,699	9,0391 8,9322 8,9854 8,9014 9,1118	-8,3920 ,2892 ,3430 ,2601 ,4860	+0,6397 ,5214 ,5308 ,5157 ,5562	
2291 2292 2293 2294 2295	Centauri	7.8 8 6 7.8	1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	53 53 43,58 54 4,88 54 20,46 54 49,61	3,579 3,228 3,530 3,427 3,335	-9,0989 8,8638 9,0620 8,9919 8,9271	.—8,4737 ,2397 ,4451 ,3772 ,3163	+0,5538 ,5089 ,5478 ,5349 ,5231	+9,0315 8,5275 8,9796 8,8677 8,7353

M.	Declination.	Annual		Logarit	hms of	Differ	ence from th Right As			
No.	(South.) Jan. 1. 1840.	Precession	a'	ъ,	c'	d'	No.	fro M.C.		Deolin.
2251 2252 2253 2254 2254 2255	51 54 49,01 47 13 20,45 38 48 23,23 25 52 4,85 51 39 31,85	-19,704 19,684 19,683 19,680 19,674	+9,0934 9,1959 9,3424 9,4885 9,0792	+9,8888 ,8581 ,7895 ,6324 ,8866	-1,2946 ,2941 ,2941 ,2940 ,2939	+9,2620 ,2740 ,2747 ,2767 ,2799	4210 4216 4217 4219 4220	$\begin{array}{c c} -3,39 \\ -2,10 \\ -2,52 \end{array}$	- 3,07	- 0,95 + 2,23 + 4,82 + 1,34 - 2,21
2256 2257 2258 2259 2260	54 4 51,71 59 44 13,18 59 27 26,81 48 4 11,06 59 20 8,62	19,672 19,672 19,671 19,667 19,667	+ 8,9956 8,7324 8,7404 9,1673 8,7634	+9,9004 ,9284 ,9271 ,8636 ,9272	-1,2938 ,2938 ,2938 ,2937 ,2937	+9,2812 ,2812 ,2819 ,2838 ,2851	4222 4221 4223 4225 4224	$\rightarrow 0.59$	- 3,82 - 1,62 - 0,76	- 0,81 + 3,82 - 3,91 + 5,36 - 2,68
2261 2262 2263 2264 2265	59 30 17,60 59 44 59 27 53,73 42 12 17,25 57 38 33,56	19,663 19,661 19,661 19,667 19,655	+8,7243 8,6990 8,7243 9,2787 8,8325	+9,9272 ,9282 ,9269 ,8191 ,9180	—1,2936 ,2936 ,2936 ,2935 ,2035	+9,2864 ,2877 ,2877 ,2896 ,2009	4227 4229 4231 4233 4234	$-\frac{2,01}{2,85}$		+ 0,08 - 3,11 - 4,38 - 1,75
2266 2267 2268 2269 2270	56 18 24,71 56 17 51,81 43 16 16,90	19,650 19,648 19,648 19,633 19,635	+9,0934 8,8865 8,8865 9,2504 8,8751	+9,8790 ,9117 ,9117 ,8273 ,9094	—1,2934 ,2033 ,2933 ,2930 ,2928	+9,2934 ,2947 ,2947 ,3027 ,3070	4235 4237 4238 4240 4244	- 2,60 - 2,02 - 1,83	$ \begin{array}{r}  - \overline{3,61} \\  - 2,98 \\  - 2,11 \end{array} $	- 1,81 + 0,43 + 1,23 - 1,59 - 3,87
2271 2272 2273 2274 2276	46 49 2,90 50 19 52,46	19,617 19,612 19,607 19,601 19,601	+8,9243 8,9031 9,1643 9,0682 9,4786	+9,9026 ,9036 ,8635 ,8768 ,6262	1,2926 ,2925 ,2924 ,2923 ,2923	+9,3107 ,3137 ,3161 ,3191 ,3197	4246 4248 4251 4254 4255	$ \begin{array}{r} -6,74 \\ -2,09 \\ -3,00 \end{array} $		$ \begin{array}{r r}  & 3,41 \\  & + 0,42 \\  & 4,51 \\  & + 3,95 \end{array} $
2276 2277 2278 2279 2280	46 11 49,09 38 2 58,64 50 38 36,22	19,576	9,3579		-1,2919 ,2917 ,2917 ,2917 ,2916	+9,3273 ,3302 ,3302 ,3307 ,3365	4258 4262 4263 4264 4266	$ \begin{array}{c c} - 1,79 \\ - 2,93 \\ - 1,10 \end{array} $		- 0,78 + 4,71 + 0,35 - 3,05 - 4,26
2281 2282 2283 2284 2284 2284	55 1 58 43 55 2 56,66	19,555 19,554	+9,3139 8,8451 8,5798 8,8325 8,4914	+9,7814 ,9030 ,9212 ,9031 ,9248	-1,2914 ,2912 ,2912 ,2912 ,2912	+9,3376 ,3404 ,3410 ,3410 ,3410	4267 4268 4270 4271 4272	$-\frac{1}{1,47}$		+ 1,90
2286 2287 2288 2288 2289	7 40 31 32,67 8 47 44 16,74 9 35 19 1,16	19,542 19,540 19,538	+ 8,9086 9,2695 9,1072 9,3522 8,2787	1-9,8946 ,8 <b>0</b> 20 ,8685 ,7613 ,9252	-1,2912 ,2910 ,2909 ,2909 ,2901	+9,3421 ,3460 ,3466 ,3477 ,3624	4278 4278 4279 4289 4291	$\begin{bmatrix} -1,88 \\ -2,52 \\ -1,73 \end{bmatrix}$		- 7,88 - 0,60 - 0,99 - 6,16 - 2,72
229 229 229 229 229	2	19,481 19,47 <i>5</i>		,90 <i>5</i> 3 ,8633		+9,3629 ,3639 ,3708 ,3729 ,3765	429 429 429 429 430	$\begin{bmatrix} -31,96 \\ -2,63 \\ -1,97 \end{bmatrix}$	2,03	- 3,33 + 0,61 + 7,52 - 1,87

AT.	NT		N/ -	No.	Right Ascen.	Annual	·	Logarit	hms of	ang - Sig I haw mang the Anal Street Spin mines fine
No.	Names.		Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	b	ć	d
2296 2297 2298 2299 2300	Centauri		7.8 8 7 7	3 3 3 2 3	H. M. 6. 12 55 18,34 55 42,11 55 49,15 55 56,65 56 9,71	s. + 3,415 3,455 3,343 3,407 3,474	8,9797 9,0046 8,9289 8,9712 9,0144	-8,3727 ,4008 ,3262 ,3695 ,4144	+0,5334 ,5884 ,5241 ,5324 ,5408	+8,8450 8,8901 8,7402 8,8302 8,9 <b>0</b> 66
2301 2302 2303 2304 2305	Centauri		7 6 7 6 6.7	2 3 3 3 3	56 42,94 57 2,72 57 36,18 57 33,40 58 1,38	3,533 3,431 3,624 3,355 3,304	-9,0494 8,9816 9,0985 8,9305 8,8965	8,4537 ,3885 ,5101 ,3416 ,3113	+0,5481 ,5364 ,5592 ,5257 ,5190	+8,9616 8,8502 9,0317 8,7465 8,6556
2306 2307 2308 2309 2310	Centauri		8 7 7 7 7.8	2 2 3 2 3	58 1,49 58 10,70 58 23,71 59 29,77 13 0 10,18	3,499 3,509 3,561 3,311 3,450	-9,0201 9,0265 9,0570 8,8969 8,9806	8,4859 ,4423 ,4788 ,3220 ,4117	+0,5439 ,5452 ,5513 ,5200 ,6378	+8,9166 8,9268 8,9733 8,6580 8,8496
2311 2312 2313 2314 2315	Virginis Centauri		7.8 7.8 7.8 8 7.8	3 3 2 2	1 13,79 1 19,68 1 29,46 1 38,91 1 52,63	3,167 3,524 3,519 3,617 3,601	-8,8246 9,0195 9,0160 9,0707 9,0611	-8,2636 ,4598 ,4571 ,5146 ,5055	+0,5006 ,5469 ,5464 ,5583 ,5564	+8,2565 8,9165 8,9110 8,9938 8,9801
2316 2317 2318 2319 2320	Centauri		7 6 9 9	3 3 2 2 2	2 4,09 2 22,17 2 27,27 2 35,05 2 42,96	3,384 3,671 3,661 3,687 3,488	-8,9325 9,0969 9,0923 9,1049 8,9924	-8,3775 ,5448 ,5406 ,5538 ,4422	+0,5294 ,5648 ,5636 ,5667 ,5426	+8,7530 9,0504 9,0242 9,0413 8,8717
2321 2322 2323 2324 2325	Centauri	•	7 7 7 8 7.8	3 2 2 2 2	2 58,55 2 59,40 3 56,97 4 13,11 4 19,45	3,243 3,673 3,506 3,268 3,669	8,8526 9,0951 	-8,3029 ,5469 ,4563 ,3225 ,5419	+0,5109 ,5650 ,5448 ,5143 ,5634	+-8,4903 9,0281 8,8808 8,5373 9,0084
23926 2327 2328 2329 2330	Centauri		6 7.8 7.8 6.7 7.8	3 3 2 3 2	4 23,98 4 39,54 4 49,76 5 21,14 6 16,60	3,669 3,433 3,409 3,489 3,640	9,0854 8,9520 8,9373 8,9815 9,0604	-8,5477 ,4166 ,4023 ,4503 ,5357	+0,5645 ,5357 ,5326 ,5427 ,5611	+9,0151 8,79 <b>66</b> 8,7654 8,8635 8,9802
2331 2332 2333 2334 2335	10		8 7.8 8 8	3332	6 37,68 7 59,29 8 3,41 8 21,79	3,711 3,553 3,435 3,292 3,487	-9,0964 9,0120 8,9414 8,8658 8,9685	-8,5722 ,4896 ,4261 ,3534 ,4579	+0,5695 ,5506 ,5359 ,5175 ,5424	+9,0305 8,9061 8,7766 8,5617 8,8310
2336 2337 2338 2339 2340	Centauri Virg <sub>i</sub> nis		7.8 7 7.8 7	2 333	8 24,36 8 8 50,06 9 0,69 9 2,60	3,663 3,480 3,440 3,550 3,173	9,0620 8,9638 8,9414 8,9999 8,8181	-8,5519 ,4550 ,4339 ,4938 ,3142	+0,5638 ,5416 ,5366 ,5502 ,5015	+8,9831 8,8222 8,7771 8,8871 8,2235

<del>, -</del>			11		Logarit	h-va of		Differ	ence from th		Catalogue.
	No.	Declination. (South.) Jan. 1. 1840.	Annual Precession		b'	c'		No.	Right As from M. C.	cension m T.	Declin.
	2296 2297 2298 2299 2300	47 16 18,49 50 10 50,18 40 20 11,06 46 15 16,44 51 15 21,17	"-19,455 19,448 19,444 19,442 19,437	+9,0719 8,9638 9,2405 9,0969 8,9086	+9,8534 ,8725 ,7982 ,8458 ,8789	-1,2890 ,2889 ,2888 ,2887 ,2886	-J-9,3801 ,3832 ,3842 ,3852 ,3867	4304 4308 4310 4311 4312	8.	5.	+ 0,20 - 3,40 - 6,42 + 1,45 - 8,12
	2301 2302 2303 2304 230 <i>5</i>	54 45 11,40 47 36 9,09 59 0 4,29 40 43 45,30 35 0 4,44	19,426 19,419 19,406 19,407 19,397	+8,6902 9,0374 7,9542 9,2201 9,3243	+9,8987 ,8548 ,9192 ,8008 ,7448	—1,2884 ,2882 ,2879 ,9880 ,2877	+9,3907 ,3932 ,3976 ,3971 ,4005	4314 4316 4319 4320 4324	- 3,03 - 2,69 - 2,96 - 1,41 - 1,60	- 2,60 - 2,28 - 2,08	- 4,23 + 1,86 + 2,01 - 9,22 - 6,31
	2306 2307 2308 2309 2310	52 36 2,31 55 31 4 <b>0,</b> 87 35 22 9,44	19,394 19,394 19,391 19,364 19,349	+8,8325 8,7993 8,5798 9,3117 8,9956	+9,8822 ,8860 ,9020 ,7462 ,8537	—1,2877 ,2877 ,2876 ,2870 ,2867	+9,4015 ,4015 ,4025 ,4111 ,4158	4326 4325 4329 4333 4336	- 2,62 - 1,70 - 3,08 - 2,85	+ 6,66	$\begin{array}{r} +4,4,24 \\ +2,08 \\ -5,86 \\ -10,6,70 \\ -1,26 \end{array}$
	2311 2312 2313 2314 2314	51 42 43,24 56 53 17,38	19,325 19,320 19,318 19,309 19,307	+9,5403 8,7559 8,7781 8,1139 8,3010	+9,4161 ,8411 ,8790 ,9070 ,9028	-1,2861 ,2860 ,2860 ,2858 ,2857	+9,4232 ,4246 ,4251 ,4278 ,4283	4343 4345 4346 4347 4350		- 2,75 + 10,41 - 1,05	- 1,31 - 2,50 - 2,06 + 0,78 - 3,52
	2316 2317 2318 2319 2320	59 3 58,69 58 43 18,55 59 42 29.70		+9,1732 -7,9542 -7,7781 -8,1761 +8,8921	+9,8042 ,9171 ,9154 ,9198 ,8627	1,2857 ,2855 ,2855 ,2854 ,2853	+9,4287 ,4314 ,4319 ,4323 ,4332	4351 4354 4355 4356 4358	$-\frac{2,42}{4,48}$	- 2,92 - 7,39	-54,15 - 0,57
	232 232 232 232 232	2  58 57 32,67 3  49 50 54,33 4  28 14 50,39	19,284 19,260 19,254	+9,4362 -7,9542 +8,8388 +9,3997 -7,6021	+9,6210 ,9163 ,8661 ,6582 ,9103	,2846			$0 \mid -4,10$ $0 \mid -2,78$ $0 \mid -1,59$	j 1,63	+0.67 $-1.82$
	232 232 232 232 232 233	7  44 19 47,41  8  42 17 22,86  9  48 6 6,76	1   19,240 1   19,239 3   19,226	+9,0569 $+9,1206$ $+8,9031$	+9,9123 ,8269 ,8104 ,8539 ,9012	,2842 ,2842 ,2839	,4469 ,4473 ,4508	437 437 437	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	- 3,19	·   -  · 5,43 -   — 0,15
	233 233 233 233 233	32	$\begin{array}{c c} 6 & 19,160 \\ 7 & 19,157 \end{array}$	+8,6532 $+9,0645$ $+9,3636$	,8754 ,8156 ,6763	,2832 3 ,2824 3 ,2823	,4588 ,4672 ,4680	438 438 438	$ \begin{array}{c cccc} 1 & - & 2,93 \\ 5 & - & 1,80 \\ 7 & - & 0,90 \\ \end{array} $		+ 0,77 + 2,65 - 1,41 + 0,43
•	23: 23: 23: 23: 23: 23:	$     \begin{array}{c cccccccccccccccccccccccccccccccc$	$\begin{array}{c c} & 19,143 \\ 19,13 \\ 11 & 19,13 \\ 11 & 19,13 \end{array}$	3   +8,9340 8   +9,0 <b>5</b> 31 2   +8,6629	838. 81 <i>5</i> 8 ,867	5 ,2820 6 ,2811 0 ,281	74713 9 ,4726 8 ,4737	3   439 5   439 7   439	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		$ \begin{array}{c c}  - & 1,40 \\  + & 1,51 \\  - & 4,81 \\  - & 0,50 \end{array} $

M			No.	Right Ascen.	Annual		Logarit	hms of	AND CONTRACTOR OF THE CONTRACT
No.	Names,	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	ь	C	d
2341 2342 2343 2344 2346	Centauri	8 8.9 7 7 7	2 2 3 2 2	H. M. S. 13 9 13,02 9 27,20 10 28,04 10 52,10 10 56,62	s. +3,528 3,719 5,742 3,415 13,651	-8,9872 9,0846 9,0904 8,9207 9,0438		+ 0,5475 ,5704 ,5731 ,5334 ,5624	+ 8,8654 9,0160 9,0233 8,7321 8,9571
2346 2347 2348 2349 2350	Centauri	7 6.7 7.8 8 7.8	3 3 3 3	10 57,18 11 34,37 11 55,48 11 57,50 12 19,42	3,589 3,495 3,767 3,650 3,793	-9,0126 8,9610 9,0948 9,0391 9,1047	-8,5192 ,4715 ,6079 ,5522 ,6204	+0,5550 ,5434 ,5760 ,5623 ,5790	+8,9088 8,8184 9,0295 8,9503 9,0429
2351 2352 2353 2354 2355	Z <sup>2</sup> Centauri	7.8 7 7 8 7.8	2 2 2 3	12 19,55 12 21,67 12 35,56 12 50,69 13 22,75	3,572 3,794 3,591 3,395 3,522	9,1049 9,1049 9,0062 8,9051 8,9684	8,5136 ,0210 ,5235 ,4237 ,4904	+0,5529 ,5791 ,6552 ,5308 ,6468	+8,8851 9,0432 8,8989 8,6948 8,8335
2356 2357 2358 2359 2360	Centauri	7 7.8 7 8.9	-2 2 3 3	13 13 31,53 14 13,68 14 17,68 14 23,18	3,695 3,633 3,411 3,559 3,527	9,0542 8,9734 8,9089 8,9837 8,9674	-8,5767 ,4963 ,4364 ,5116 ,4958	+0,5676 ,5481 ,5329 ,5513 ,5474	4-8,0732 8,8428 8,7061 8,8616 8,8321
2361 2362 2363 2364 2365	Centauri	7.8 7.8 7.8 7.8 7.8	2 3 2 3	14 32,71 14 14 43,84 14 47,09 14 55,20	3,640 3,640 3,699 3,640 3,594	-9,0227 9,0226 9,0020 9,0218 8,9984	8,5523 ,5521 ,5324 ,5526 ,5307	+0,5611 ,5611 ,5562 ,5611 ,5556	-1-8,9261 8,9259 8,8929 8,9247 8,8871
2366 2367 2368 2369 2370	Centauri	7.8 7.8 7.8 7.8 8	3 2 3 2 2	15 15,63 15 29,71 15 37,90 15 47,90 16 13,51	3,396 3,604 3,606 3,356 3,537	-8,8988 9,0012 9,0016 8,8784 8,9656	-8,4325 ,5365 ,6377 ,4154 ,5065	4-0,5310 ,5568 ,5570 ,5258 ,5486	+8,6805 8,8919 8,8926 8,6201 8,8299
2371 2372 2373 2374 2375	Centanvi	7,8 - 9 7 9	3   2 2 3	16 20,11 16 16 52,00 16 55,24 17 15,52	3,603 3,556 3,892 3,369 3,535	8,9972 8,9732 9,1248 8,8816 8,9609	-8,5379 ,5159 ,6688 ,4259 ,5069	+0,5567 ,5510 ,5902 ,5275 ,5484	+8,8867 8,8440 9,0701 8,6321 8,8216
2376 2377 2378 2379 2380		7 7 8 6	2 2 2 1	17 17 25,55 17 29,68 17 35,79 17 39,27	3,536 3,359 3,667 3,847 3,451	8,9608 8,8759 8,9757 9,1027 8,9185	-8,5076 ,4230 ,5233 ,6510 ,4668	+0,5485 ,5262 ,5523 ,5851 ,5379	4-8,8215 8,6143 8,8491 9,0413 8,7327
2381 2382 2383 2384 2385	Hydræ A.	8 9 8 7	1 2 2 1 2	17 42,62 18 21,99 18 39,35 18 55,44 19 13,37	3,573 3,709 3,852 3,574 3,286	-8,9777 9,0389 9,1002 8,9733 8,8421	8,5265 ,5916 ,6546 ,6300 ,4000	+0,6530 ,6693 ,6867 ,5631 ,5167	+8,8528 8,9521 9,0383 8,8466 8,4777

<del></del> -	Declination			Logarit	has of	·	Differ		ne Brisbane accusion	Catalogue.
No,	<i>(South.)</i> Jan. 1, 1840.	Amnual Precession	a'	<i>b'</i>	o'	d'	No.		om   T.	Declin.
2341 2342 2343 2344 2345	49 1 54,98 58 23 48,80 58 55 41,49 40 20 54,42 54 57 37,74	-19,126 19,121 19,094 19,084 19,082	+8,7708 -8,4472 -8,5563 +9,1238 -7,0000	+9,8584 ,9100 ,9118 ,7901 ,8920	-1,2821 ,2815 ,2809 ,2807 ,2806	+9,4753 ,4765 ,4825 ,4849 ,4853	4397 4399 4408 4412 4413	1,62 1,99 3,43 2,15 2,47	9.	" + 3,45 + 5,24 + 0,17 - 1,66 - 8,27
2346 2347 2348 2349 2350	51 54 13,21   46 2 14,47   59 20 34,90   54 34 33,82   60 7 54,43	19,082 19,066 19,055 19,053 19,044	+8,4314 +8,8976 -8,6628 -7,3010 -8,7324	+9,8748 ,8357 ,9128 ,8893 ,9160	,2806 ,2803 ,2800 ,2800 ,2797	+9,4854 ,4888 ,4911 ,4911	4414 4416 4418 4419 4420	$\begin{bmatrix} -2,50 \\ -1,12 \\ -1,63 \end{bmatrix}$	- 2,33 - 1,65	- 3,36 + 5,84 - 2,74 - 5,96 -11,20
2351 2362 2353 2354 2356	50 26 27,36 60 8 52,58 51 20 30,59 38 0 37,36 47 6 12,95	19,044 19,042 19,037 19,031 19,016	+8,5563 -8,7324 +8,4314 +9,1734 +8,8062	+9,8650 ,9160 ,8704 ,7672 ,8423	1,2797 ,2797 ,2796 ,2795 ,2791	+9,4935 ,4938 ,4950 ,4961 ,4992	4421	$\begin{bmatrix} -1,54 \\ -2,39 \end{bmatrix}$	— 0,26 ——	$\begin{array}{c} + 1,34 \\ - 5,10 \\ + 0,22 \\ - 0,96 \\ + 0,03 \end{array}$
2356 2357 2358 2359 2360	56 2 47 43 20,46 38 47 13,39 48 58 54,84 47 3 2,94	19,013 19,011 18,992 18,991 18,987	-8,3040 +8,7634 9,1399 8,6434 8,7924	+9,8960 ,8465 ,7738 ,8545 ,8413	—1,2790 ,2790 ,2786 ,2785 ,2785	4-9,4996 ,5000 ,5041 ,5045 ,5049	4430 4431 4433 4434 4436	$ \begin{array}{r}  - 2,73 \\  - 1,79 \\  - 2,45 \\  - 2,01 \end{array} $		+ 2,46 + 5,64 + 1,67 - 0,58
2361 2362 2363 2364 2365	53 9 37,63 53 8 51 2 16,28 53 4 34,91 50 39 58,32	18,983 18,971 18,979 18,978 18,972	+7,4771 7,4771 8,3617 7,6021 8,4150	+9,8798 ,8797 ,8673 ,8792 ,8648	1,2784 ,2784 ,2783 ,2782 ,2781	+9,5060 ,5060 ,5067 ,5071 ,5082	4440 4441 4442 4443	- 2,58 - 2,75 - 3,54 - 1,55		+ 0,88 - 1,44 + 0,51 + 0,23
2306 2367 2368 2369 2370		18,962 18,957 18,953 18,947 18,940	+9,1761 8,3424 8,3010 9,2601 8,7559	+9,7576 ,8665 ,8670 ,7174 ,8396	-1,2779 ,2778 ,2777 ,2776 ,2773	+9,5097 ,5112 ,5119 ,5126 ,5152	4444 4446 4447 4448 4450			- 1,06 - 0,23 - 3,73 + 7,20 + 1,93
2371 2372 2373 2374 2375	47 56 61 48 49,95 34 14 24,11	18,932 18,923 18,916 18,915 18,905	+8,3222 +8,6628 -8,9345 +9,2380 +8,7634	+9,8637 ,8459 ,9202 ,7254 ,8354	2772 ,2770 ,2763 ,2768 ,2768	5177 5188, 5192	4452 4455 4456 4469 4462	$ \begin{array}{r}                                     $		$ \begin{array}{r} -3,02 \\ -2,40 \\ -2,32 \\ -16,13 \end{array} $
2376 2377 2378 2379 2380	33 10 0,17 48 18 29,26 60 13 45,65	18,903 18,901 18,899 18,897 18,896		+9,8353 ,7130 ,8478 ,9131 ,7886	-1,2765 ,2765 ,2764 ,2764 ,2764	+9,5213 ,5217 ,5221 ,5228 ,5228	4463 4464 4465 4466 4467	- 2,56 - 2,41 - 2,01 - 2,20	(the rect)	- 0,79 + 3,29 - 7,33 - 4,54
2381 2382 2383 2384 2386	54 56 47,97 60 5 28,57 1 48 8 16,20	18,854		+9,8494 ,8871 ,9118 ,8457 ,6090	+1,2763 ,2759 ,2757 ,2754 ,2753	+9,6231 ,5267 ,5281 ,5302 ,5313	4468 4470 1471 4473 4475	- 1,85 - 3,52 - 4,99 + 1,20 - 1,93	1): <del></del>	+ 8,81 ( + 1,14 ( - 7,68 ( - 5,99 ( - 2,26 (

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No.	Names,	Mag.	No.	Right Ascen.	Annual		Logari	thms of	
1,0,1	11441651	in ing	Obs.	Jan. 1, 1840.	Precesn.	а	[ b	C	$\mid  d \mid$
2386 2387 2388 2389 2390	K Centauri	6 7.8 7 7	3 3 1 2 1	H. M. 8. 13 I9 39,44 19 43,35 19 44,11 19 47,26 19 47,98	8 +3,619 3,297 3,821 3,521 3,662	-8,9922 8,8455 9,0817 8,9453 9,0070	-8,5529 ,4062 ,6431 ,5068 ,5685	-+0,6586 ,5181 ,5822 ,5467 ,5025	-j-8,8788 8,4966 9,0155 8,7938 8,9033
2391 2392 2393 2394 2396	Centauri	7.8 7.8 9 8	3 -1 2 2	20 1,10 20 20 9,78 20 38,86 20 59,32	3,561 3,375 3,799 3,513 3,897		8,5261 ,4410 ,6346 ,5051 ,6760	+0,5510 ,5283 ,5797 ,5457 ,5907	+8,8281 8,6217 8,0985 8,7796 9,0484
2396 2397 2398 2399 2400	Centauri	8 8.9  8	2 3 -	22 21 52,50 21 57,55 22 22 9,49	3,567 3,933 3,578 5,500 3,474	8,9628 9,1174 8,9644 8,9284 8,9160	8,5313 ,6909 ,5383 ,5031 ,4911	-1-0,5523 ,5947 ,5536 ,5441 ,5408	+8,8274 9,0615 8,8310 8,7591 8,7310
2401 2402 2403 2404 2405	Centauri Virginis. Centauri	7.8 7 7 7 7.8	3 2 3 2	22 34,97 22 44,48 22 49,09 22 51,00 23 10,72	3,365 3,174 3,667 3,433 3,522	8,8634 8,8055 8,9507 8,8959 8,9360	—8,4407 ,3836 ,5365 ,4747 ,6158	+ 0,5257 ,5016 ,5523 ,5367 ,5468	+8,5794 ,1459 ,8170 ,6813 ,7740
2406 2407 2408 2409 2410	Centauri	7 9 67 7.8	- 3 2 3	23 23 28,41 23 28,65 23 42,43 23 43,92	3,678 3,679 3,815 3,321 3,457	-8,9603 8,9602 9,0632 8,8477 8,9045	-8,5419 ,5129 ,6459 ,4315 ,4886	+0,5536 ,5538 ,5815 ,5213 ,5387	+8,8 <b>2</b> 42 ,8241 ,0889 ,5176 ,7 <b>0</b> 48
2411 2412 2413 2414 2416	Hydræ Centauri	7 7.8 7.8 8 7.8	1 2 3 3 3	24 3,98 24 4,46 24 6,18 24 20,11 24 24,65	3,300 3,510 3,868 3,480 3,969	-8,8391 8,9270 9,0782 8,9127 9,1196	8,4254 ,5131 ,6643 ,5002 ,7075	+0,5185 ,5453 ,5804 ,5410 ,5987	+8,4778 8,7576 9,0009 8,7254 9,0648
2416 2417 2418 2419 2420	Centauri	7.8 7 (7.8) 8 7.8	3 1 1 3 3	24 30,21 24 47,70 24 59,90 25 46,79 25 64,86	3,461 3,696 3,647 3,973 3,608		8,4923 ,5535 ,6764 ,7107 ,5611	+0,5892 ,5558 ,5619 ,5991 ,5573	+8,7042 8,8307 8,8693 0,0586 8,8337
2421 2422 2423 2424 2424 2425	Centauri	7.8 	1	25 25 26 14,42 26 26 26,49	3,611 3,608 3,846 3,919 3,954	-8,9659 8,9645 9,0044 9,0918 9,1049	8,5626 ,5617 ,6624 ,6909 ,7040	+0,5576 ,5573 ,5850 ,5932 ,5970	+8,8362 8,8336 8,0914 9,0289 9,0463
2426 2427 2428 2429 2430	Centauri	8 7 8 67 7	2 1 1 2 1	26 28,41 27 0,17 27 33,78 27 34,89 27 40,87	3,617 3,609 3,849 3,639 3,618	8,9667 8,9180 9,0600 8,9296 8,9199	8,6661 ,5200 ,5643 ,5349 ,5260	+0,5583 ,5452 ,5853 ,5489 ,5463	+8,8379 ,7403 ,9856 ,7662 ,7463

ī	i	Dualination	- (	. <del></del>	Logarit	thms of		Diffe	rence from th		Catalogue
ļ	No.	Declination (South.)	Annual	·				No.	Right As		Declin.
	24,	Jan. 1. 1840	Precession	a'	b'	C.	$d_i^{\prime\prime}$	110,	M.C.	" <sub>T.</sub>	!
	2386 2387 2388 2388 2589 2390	50 20 4,01 26 34 9,88 58 41 47,49 44 42 26,37 51 55 34,59	"-18,834 18,834 18,830 18,830 18,830	+8,1461 +9,3711 -8,8325 +8,8261 -7,4771	+9,8596 ,6241 ,9048 ,8204 ,8692	-1,2749 ,2749 ,2749 ,2749 ,2749	+9,5337 ,5337 ,8344 ,5344 ,5344	4476 4480 4477 4481 4478	s. — 1,63 — 1,57 — 1,11	s. 1,42	- 2,30 + 9,78 - 1,09 - 1,82 + 1,96
	2391 2392 2393 2394 2395	47 2 38,00 33 44 57 50 2,18 43 52 50,94 60 45 16,69	18,824 3 18,817 3 18,818 6 18,804 1 18,794	+8,6632 +9,2804 -8,7781 +8,8633 -8,9590	+9,8374 ,7175 ,9004 ,8132 ,9130	-1,2747 ,2745 ,2746 ,2746 ,2743	,5368 ,5365 ,5389	4484 4486 4485 4489 4491	3,03 1,96 0,08 1,31	No. 24 (1)	+ 2,56 - 2,68 + 0,72 - 3,46
	2396 2397 2398 2399 2400	47 3 57,24 61 30 57,24 47 19 26,12 42 35 40 45 25,98	18,794 18,768 18,766 18,762 18,769	+8,6232 -9,0043 +8,5563 +8,9085 +8,9956	+9,8367 ,9156 ,8360 ,8020 ,7863	-1,2740 2734 ,2734 ,2733 ,2732	+9,5406 ,5450 ,5453 ,5460 ,6463	4493 4496 4498 4501 4603	13,20 — 2,10 — 1,70 — 2,62		+ 0,46 0,46 - 0,43
	2401 2402 2403 2404 2405	31 18 45,63 12 37 14,25 46 26 18,63 37 34 12,14 48 37 20,05	18,747 18,743 18,739 18,737 18,727	+9,2718 9,5391 8,6232 9,1072 8,8325	+9,6870 ,3113 ,8311 ,7563 ,8096	1,2729 ,2728 ,2727 ,2727 ,2725	,6490 ,6497 ,5497	4509 4511 4510 4512 4514	- 3,16 - 2,40 - 2,36 - 1,05 - 1,82		- 5,17 + 7,83 + 2,64 - 2,62 - 2,06
- 一十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二	2406 2407 2408 2409 2410	46 56 46 56 42,44 57 24 8,00 27 51 53,01 39 8 42,69	18,722 19,718 18,718 18,712 18,712	+8,5441 +8,5441 -8,8261 +9,3366 +9,0453	4-9,8344 ,8342 ,8960 ,6401 ,7705	1,2724 ,2728 ,2723 ,2721 ,2721	,5530 ,5530	4516 4518 4517 4521 4620	- 1,33 1,43 0,83		+5,81 $-4,93$ $-0,49$ $-1,2717$
The second secon	2411 2412 2413 2414 2415	40 29 40,55	18,691	+9,3711 +8,5751 -8,9138 +8,0823 -9,0531	+9,6084 ,8006 ,9016 ,7824 ,9140	-1,2718 -,2718 -,2718 -,2716 -,2716	+9,5560 ,5560 ,5573 ,5676	4525 4524 4522 4527 4526	- 1,17 - 2,83 - 1,82 - 2,69 - 1,63		- 0,61 + 2,09 + 1,05 - 0,22 - 0,42
The second property of the second sec	2416 2417 2418 2419 2420	47 26 51,40 49 58 8,10 61 31 24,20	18,676	+9,0374 +8,4150 +7,0000 -9,0645 +8,3010	+9,7699 ,8368 ,8535 ,9127 ,8377	-1,2715 ,2713 ,2711 ,2705 ,2704	,6596 ,6605 ,5647	4529 4532 4533 4535 4537	1,71	15 (14.14.14.15) 	+ 2,88 + 1,42 + 0,33 - 0,43 + 2,48
ACTION AND A SECOND AND A SECOND AND A SECOND ASSESSMENT AS A SECOND AS A SECO	2421 2422 2423 2424 2424	57 40 82,35 59 62	18,640 18,636 18,629 18,625 18,623	+8,2787 +8,3010 -8,8376 -9,0043 -9,0492	+9,8389 ,8376 ,8953 ,9053 ,9095	-1,2704   ,2703   ,2703   ,2701   ,2701	,5663 ,5673	4536 4538 4569 4543 4644		10 0 mm - 10 10 10 10 10 10 10 10 10 10 10 10 10	+ 1,41
	2426 2427 2428 2429 2430	41 35 40,70 57 23 26,75 43 19 20,87	18,623 18,605 18,686 18,686 18,684		+9,8893 ,7900 ,8929 ,8039 ,7926	+1,2700 ,2697 ,2692 ,2692 ,2691	,£726 ,6726	4645 4547 4549 4560 4663	— 1,78	3,83	+ 16,66 - 1,31 -14,98 + 0,88 + 0,72

No	Names	No.	lo. Right Ascen.	Annual		Logarit	hms of	
110	Maries,	Mag. O	bs. Jan. I, 1840.	Precesn.	. a	b	o	d
2431 2432 2433 2434 2435	Centauri	6.7 8.9	H. M. S. 1 13 27 42,15 2 27 45,17 1 27 59,63 1 28 4,62 2 28 18,11	+ 3,856 3,580 3,856 3,662 3,658	—9,0623 8,9464 9,0608 8,9809 8,9786	8,6683 ,5528 ,6687 ,5892	+0,5861 ,5539 ,5861 ,5637 ,5632	+8,0869 ,8007 ,9870 ,8639 ,8609
2436 2437 2438 2439 2440	Centauri	7.8 8 7.8 8 7.8	2 28 25,78 2 28 25,29 1 28 34,73 2 28 39,13 1 29 0,58	3,839 3,412 3,522 3,412 3,646	-9,0525 8,8733 8,9192 8,8731	—8,6625 ,4837 ,5299 ,4845 ,5838	+0,5842 ,5330 ,5468 ,5330 ,5617	+8,9763 ,6238 ,7444 ,6234 ,8463
2441 2442 2443 2444 2445	Centauri	7.8 7.8 7.8	29 24,02 29 24,02 29 37,90 2 29 44,55 29	3,752 3,351 3,755 3,391 3,851	-9,0139 8,8482 9,0139 8,8627 9,0514	-8,6290 ,4633 ,6304 ,4795 ,6693	+0,5743 ,5252 ,5740 ,5303 ,5856	4-8,9183 ,534 <i>5</i> ,9183 ,5907 ,9741
2446 2447 2448 2449 2450	Centauri	7 6.7 8 8 8	2 30 9,58 2 30 19,25 2 31 28,62 2 31 33,34 2 31 45,15	3,662 3,484 3,585 6,593 3,899	8,9737 8,8983 8,9371 8,9404 9,0617	-8,5931 ,5184 ,5636 ,5672 ,6899	+0,5637 ,5421 ,5545 ,5555 ,8909	+8,8696 ,6967 ,7851 ,7916 ,9893
2451 2452 2453 2454 2456	Centauri	7.8 7	3 31 48 43 31 51,09 31 57,18 32 1,31 32 22,35	4,008 3,972 3,586 3,358 4,013	9,1016 9,1036 8,9360 8,8457 9,1007	-8,7298 ,7322 ,5649 ,4749 ,7320	+0,6029 ,5990 ,5546 ,5261 ,6035	4-9,0432 9,0259 8,7832 8,5806 9,0422
2456 2457 2458 2459 2460	Centauri Hydræ Centauri	7 7	3 2 29,05 32 32,77 32 31,98 2 32 56,06 3 13,68	3,548 3,322 3,848 3,698 3,569	-8,9188 8,8328 9,0395 8,9789 8,9255	-8,5505 ,4645 ,6716 ,6130 ,5610	+0,5500 ,5214 ,5852 ,5680 ,5525	+8,7474 ,4707 ,9580 ,8631 ,7625
2461 2462 2463 2464 2465	Centauri	8.9 6.7 8	3 18,89 33 23,79 3 27,38 3 28,00 3 33 28,00	3,932 3,933 3,523 3,536 3,526	-9,0679 9,0679 8,9063 8,9114 8,9069	-8,7042 ,7044 ,5429 ,5483 ,5449	+0,6946 ,5947 ,5469 ,5485 ,5473	+8,9985 ,9984 ,7199 ,7318 ,7195
2466 2467 2468 2469 2470	Centauri	8 7 7.8	34 9,54 2 34 10,77 3 34 16,15 1 34 24,54 3 35 4,63	3,538 3,597 3,712 3,508 3,914	—8,9101 8,9338 8,9799 8,8977 9,0546	8,5ŏ04 6745 6210 5395 6998	- -0,5488 ,5559 ,5696 ,545  ,5926	-]- 8,7295 ,7806 ,8656 ,7003 ,9806
2471 2472 2473 2474 2475)	Centauri	7.8	35 15,87 35 36,42 35 56,69 2 36 6,12	4,071   8,717   3,671   3,815   4,086	-9,1087 8,9792 8,9594 9,0142 9,1101	8,7540 ,6244 ,6073 ,6638 ,7607	+0,6097 ,5702 ,5648 ,5815 ,6113	4-9,0533 8,8650 8,8306 8,9216 9,0553

	Declination	i		Logarit	hins of	······································	Differ	ence from th		Catalogue.
No.	(South.)	Annual Precession						Right A	sconsion om	Declin.
	Jan. 1, 1840.	10000	a'	b'	c'	<u>d'</u>	No.	M.C.	т.	
2431 2432 2433 2434 2435	57 36 38,67 45 36 28,59 57 29 34,01 49 46 52,26 49 31 50,76	18,584 18,582 18,573 18,571 18,565		+9,8938 ,8214 ,8931 ,8499 ,8481	-1,2691 ,2691 ,2689 ,2688 ,2687	+9,5733 ,5736 ,5748 ,5761 ,5761	4561 4554 4556 4557 4568	3. - 2,96 - 2,77 - 3,29 - 2,54 - 2,32	s. 	+ 0,80 - 0,76 - 8,37 - 1,67 + 3,12
2436 2437 2438 2439 2440		18,558 18,558 18,667 18,561 18,544	-8,8976 +9,1643 +8,8451 +9,1643 +7,0000	+9,8894 ,7171 ,7918 ,7168 ,8420	-1,2686 ,2686 ,2685 ,2684 ,2681	+9,6767 ,5770 ,5773 ,6779 ,6795	4559 4560 4561 4562 4564	- 1,86 + 0,90 - 2,0L - 0,89 - 2,06		- 3,30 +16,14 + 1,08 -69,88 + 2,68
2441 2442 9443 2444 2445	29 1 19,41 58 19 51,23 32 17 40,89	18,529 18,625 18,520 18,518 18,509	8,6721 +9,2878 8,6812 +9,2122 8,9243	+9,8703 ,6622 ,8701 ,6987 ,8883	1,2678 ,2678 ,2676 ,2676 ,2674	+9,5810 ,6810 ,8522 ,6825 ,5834	4565 4567 4568 4572 4673	$ \begin{array}{c c}  & 2,04 \\  & 2,33 \\  & 2,23 \\  & &  \end{array} $		+ 0,30 + 5,11 - 5,04
2446 2447 2448 2449 2450	38 55 50,24 44 46 32,07 45 12 52,82	18,502 18,496 18,467 18,463 18,446	7,8451 +8,9823 +8,5185 +8,4624 9,0000	+9,8442 ,7636 ,8122 ,8164 ,8916	-1,2672 ,2671 ,2662 ,2661 ,2659	+9,5847 ,5853 ,5907 ,6910 ,5922	4574 4575 4581 4583 4584	- 2,95 - 2,71 - 2,35 - 1,69 - 1,68		+ 3,33 + 2,21 - 6,40 - 1,80 + 8,69
2451 2452 2453 2454 2454	61 4 48,32 44 40 48,37 28 55 0,20	18,444 18,444 18,441 18,439 18,425	-9,1173 -9,1238 +8,5185 +9,2787 -9,1238	+9,9056 ,9062 ,8111 ,6487 ,9050	-1,2659 ,2658 ,2658 ,2657 ,2654	+9,5922 ,5925 ,5928 ,5931 ,5948	4585 4586 4587 4589 4590		— <u>1,54</u>	- 5,24 + 2,00 - 0,13 + 2,48 - 4,55
2456 2457 2458 2458 2460	26 43 9,35 65 67 22,73 49 68 46,72	18,423 18,421 18,421 18,407 18,398	+8,7482 +9,3424 -8,9191 -8,3802 +8,6335	+9,7920 ,6014 ,8819 ,8473 ,7998	—1,2653 ,2653 ,2653 ,2650 ,2648	+9,5961 ,6951 ,5954 ,5972 ,6984	4592 4693 4691 4694 4596	-3,24 $-2,40$ $-1,39$	— 1,69 ——	+ 1,78 - 3,54 + 0,63 - 4,29 + 0,78
2461 2462 2464 2464 2464	2 58 25 28,28 3 40 35 21,92 4 41 22 8,80	18,391 18,388	-9,0463 -9,0492 +8,8451 +8,7993 +8,8388	+9,8933 ,8932 ,7762 ,7830 ,7759	-1,2646 ,2646 ,2646 ,2645 ,2642	-1-9,5989 ,6992 ,5992 ,6995 ,6013	4697 4598 4699 4600 4601	1,99 2,49 1,87		+ 2,07 + 1,46 + 3,16 - 6,43
2460 2460 2460 2460 2470	7 44 37 39,14 8 50 12 12,89 9 39 2 <b>2</b> 5,81	18,362 18,360 18,356	+8,7924 +8,4314 -8,4771 +8,9031 -9,0334	+ 9,7815 ,8088 ,8477 ,7644 ,8872	-1,2640 ,2639 ,2639 ,2638 ,2638	+9,6024 ,6027 ,6030 ,6036 ,6065	4602 4603 4604 4605 4607	— 1,92   — 2,04   — 2,23		$ \begin{array}{r} -1,68 \\ +0,06 \\ -4,62 \\ +0.76 \\ +10,27 \end{array} $
247 247 247 247 247 247	2 50 12 3 47 59 6,66 4 53 52 33,67	18,325 18,313 18,301	$ \begin{array}{r} -9,1761 \\ -8,6185 \\ -8,0792 \\ -8,8633 \\ -9,1903 \end{array} $	+9,9067 ,8470 ,8320 ,8680 ,9056	,46.25		4608 4609 4613 4614 4615	$\begin{vmatrix} -\frac{1}{2,72} \\ -\frac{2,00}{2,00} \end{vmatrix}$		$ \begin{array}{r} -0,69 \\ +1,41 \\ +1,78 \\ +2,19 \end{array} $

	Names.		No.	Right Ascen.	Aineal		Logari	thme of	er enteren stern stern stern stern
No.	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesp.	1 41	<i>b</i>	· 'c	<u>d</u>
2476 2477 2478 2479 2480	Centauri	6.7 8 7.8 8 9	2 2 3 3	H. M. S. 18 36 34,17 36 60,72 37 22,57 37 39,80 38 10,14	s. 3,736 3,784 3,760 3,713 4,086	-8,9818 8,9992 8,9894 8,9631 9,1015	-8,6345 ,6536 ,6447 ,6275	-1-0,5724 -5779 -5752 -5697 -5113	+8,8702 8,8987 8,8829 8,8492 9,0448
2481 2482 2483 2484 2485	Centauri	9.10 8.9 7.8 7.8		38 10,21 38 38 50,77 38 50,62 39 3,58	4,086 4,090 4,100 3,652 3,648	9,1015 9,1027 9,1033 8,9418 8,9399	-8,7626 ,7637 ,7677 ,6058 ,6050	#-1-0,6113 ,6117 ,6128 ,5625 ,5625	+9,0448 9,0463 9,0472 8,8002 8,7967
2486 2487 2488 2489 2490	Centanri	7.8 7.8 7.8 7.8	3 2 2	39 20,03 39 44,09 39 47,04 39 51,41	3,482 3,462 3,530 3,538 4,110	-8,8756 8,8674 8,8953 8,8952 9,1023	-8,5419 ,5360 ,5643 ,5642 ,7720	-+0,5418 ,5393 ,5488 ,5488 ,6138	-1-8,6484 8,6251 8,7011 8,7008 9,0462
2491 2492 2493 2494 2496	Centauri Hydræ Centauri	8 8 7 7.8	3 2 3	\$\begin{pmatrix} \phi 0 & 6,09 \\ 40 & 29,75 \\ 40 & 0,85 \\ 41 & \\ 41 & 47,21 \end{pmatrix}\$	3,934 3,933 3,967 3,801 3,805	9,0424 9,0409 8,8326 8,9909 8,9903	-8,7130 ;7132 ;5077 ;6667 ;6691	+0,5948 ,5947 ,5272 ,5799 ,5803	4-8,9650 ,9630 ,4983 ,8876 ,8870
2496 2497 2498 2499 2500	Centauri	6.7 6 7 6 6.7	6 1 1 1	41 49,31: 41 54,63 42 7,24 42 16,72 42 33,53	3,806 3,668 3,689 3,483 3,410	-8,9903 8,9385 8,9461 8,8690 8,8435	8,6694 ,6180 ,6266 ,6501 ,5283	,5644 ,5669 ,5419 ,5327	-1-8,8870 ,7964 ,8109 ,6346 ,5496
2501 2502 2503 2504 2505	Centauri	7.8 7.8 6.7 7. 7.8	1. 1. 2. 3	42 37,34 42 51,35 43 23,00 43 57,87 44 2,10	3,763 3,413 3,832 3,865 3,684	-8,9719 -8,8419 -8,9944 -9,0045 -8,9384	-8,6546 ,5286 ,6810 ,6937 ,6282	+0,5755 ,6331 ,5834 ,5871 ,6663	-1-8,8571 ,5518 ,8946 ,9105 ,7980
2506 2507 2508 2509 2610		7,8 7.8 7,8 7,8	3 (1) 11 <b>3</b> (1)	44 .43,99 44 .66,05 45 .17,80 45 .21,45 45 .42,21	3,710 3,810 3,690 3,466 3,775	8,9459 8,9813 8,9370 8,8567 8,9668	-8,6388 ,6753 ,6325 ,6525 ,6642	+0,5694 ,5809 ,5670 ,5398 ,5769	-1-8,8126 ,8743 ,7964 ,6023 ,8504
2511 2512 2513 2614 2515		8. 7. 6.7	2 1 2 1 3	46 3,36 46 3,36 46 4,36 46 9,70	\$1871 3,736 3,889 8,592 3,814	-8,9998 8,9511 9,0055 8,8991 8,9790	-8,6984 ,6501 ,7048 ,5985 ,6786	+0,5878 ,5723 ,5898 ,5553 ,6814	1-8,9042 ,8230 ,9131 ,7181 ,8711
2516 2617 2518 2519 2520	F , [ ]	7.8 7.8 8 7.8	2 2 3	46 9,72 47 13,28 47 20,54 47 28,06 47 41,66	3,616 3,532 3,534 3,375 3,748	8,9072 8,8752 8,8756 8,8237 8,9506	-8,6069 ,5795 ,5808 ,5296 ,6574	+0,5582 ,5480 ,5483 ,6283 ,5738	+8,7364 ,6001 ,6612 ,4790 ,8236

Ī	1	Declination.			Logari	thms of		Diffe		ho Brisbane	Catalogue.
	No.	(South.) Jan. 1. 1840.	Annual Precession		b'	c'	<i>d'</i>	No.	M.C.	scension om   T.	Declin.
2 2 2	476 477 478 479 480	50 37 37,24 52 28 43,04 51 27 52,92 49 19 16,36 61 18 2,05	18,280 18,268 18,261 18,239 18,220	-8,6232 -8,7924 -8,7160 -8,4914 -9,1959	+9,8484 ,8592 ,8531 ,8391 ,9018	-1,2620 ,2617 ,2615 ,2610 ,2605	-1-9,6127 ,6141 ,6149 ,6174 ,6197	4618 4621 4622 4626 4629	- 1,92 - 2,21 - 0,28 - 3,19 - 3,15	- 1,92 - 1,98	- 2,37 - 3,73 + 0,47 + 0,78 + 4,87
2 44 54	481 482 483 484 485	61 17 55,75 61 23 61 28 28,50 46 10 17,60 45 57 40,59	18,220 18,220 18,196 18,198 18,190	9,1959 9,1987 9,2068 7,3010 5,0000	+9,9018 ,9022 ,9019 ,8165 ,8147	1,2605 ,2605 ,2600 ,2600 ,2598	+9,6197 ,6197 ,6224 ,6221 ,6230	4630 4631 4633 4634 4636	$ \begin{array}{r}  -1,22 \\  -4,45 \\  -2,15 \\  -3,80 \end{array} $		1,03 1,13 + 0,51 + 0,22
2 2 2	486 487 488 489 489	36 19 33,89 34 53 48,74 39 43 2,74 39 42 59,57 61 28	18,181 18,164 18,161 18,161 18,165	+9,0043 +9,0569 +8,8062 +8,8062 9,2175	+9,7305 ,7150 ,7630 ,7629 ,9010	—1,2596 ,2592 ,2591 ,2591 ,2590	+9,6240 ,6259 ,6262 ,6262 ,6268	4638 4640 4642 4643 4641	- 3,82 - 1,66 - 1,88 - 3,09	- 2,83 - 2,60	+ 1,45 - 6,42 - 4,44 - 9,03
2	491 492 493 494 404 495	56 46 55,38 56 40 29,68 27 33 50,89 52 0 52 0 49,02	18,149 18,136 18,114 18,109 18,086	-9,0682 -9,0719 -+9,2718 8,8513 8,8633	+0,8795 ,8787 ,6219 ,8527 ,8522	1,2588 ,2585 ,2580 ,2579 ,2573	+9,6276 ,6289 ,6313 ,6319 ,6342	4646 4648 4651 4652 4655	$\begin{array}{r} -2,37 \\ -4,03 \\ +62,21 \\ -2,12 \end{array}$		$ \begin{array}{c c} -7,43 \\ +4,58 \\ +10,83 \\ \hline -2,96 \end{array} $
9	2496 2497 2498 2499 2500	52 0 51,03 46 6 6,05 47 4 7,33 35 37 58,95 30 31 18,83	18,084 18,082 18,074 18,069 18,056	-8,8633 -8,0000 -8,3424 +9,0043 +9,1903	-+9,8521 ,8132 ,8199 ,7205 ,6608	-1,2573 ,2572 ,2570 ,2569 ,2566	+9,6345 ,6348 ,6366 ,6361 ,6374	4656 4657 4658 4659 4661	- 1,72 - 2,16 - 2,73 - 1,33 - 1,46	$ \begin{array}{c c} -1,40 \\ -0,71 \\ -1,58 \end{array} $	$ \begin{array}{c c} -1,90 \\ +3,01 \\ +4,04 \\ -5,80 \\ -8,53 \end{array} $
1	2501 2502 2503 2504 2505	50 7 35,03 30 49 22,41 52 34 42,45 53 37 10,48 46 20 6,92	18,056 18,046 18,026 18,005 18,000	-8,7404 +9,1790 -8,9191 -8,9×68 -8,2787	+9,8399 ,6617 ,8540 ,8595 ,8129	—1,2666 ,2664 ,2659 ,2554 ,2553	+9,6374 ,6385 ,6405 ,6426 ,6431	4660 4663 4665 4667 4668	$\begin{array}{r} -2,50 \\ -2,40 \\ -2,26 \\ -2,04 \end{array}$	- 1,20 - 1,98	- 2,75 - 3,58 + 1,11 - 1,53 + 5,67
.	2506 2507 2508 2509 2510	47 20 32,41 51 22 10,26 46 18 3.11 33 48 10,55 49 52 19,08	17,974 17,966 17,965 17,951 17,938	8,4914 8,8751  8,3222 +-9,0531 8,7853	4-9,8194 ,8455 ,8116 ,6978 ,8355	1,2546 ,2545 ,2541 ,2541 ,2538	+9,0457 ,6465 ,6477 ,6480 ,6493	4676 4677 4680 4682 4684	- 2,82 - 2,52 - 2,01 - 2,41 - 2,13	— <del>1,99</del>	+ 1,67 + 0,92 + 2,64 + 6,97 - 2,35
	2511 2512 2513 2514 2515	53 54 22,24 41 12 21,36	17,928 17,925 17,923 17,923 17,920	-8,9956 8,6335 -9,0294 +8,4914 -8,8865	+9,8560 ,8235 ,8591 ,7704 ,8435	—1,2535 ,2536 ,2634 ,2534 ,2533	+9,6603 ,6505 ,6508 ,6508 ,6510	4695 4038 4689 4690 4691	$\begin{array}{c} -2,14 \\ -2,37 \\ -1,17 \\ -1,34 \\ -2,82 \end{array}$	- 2,64 - 1,51	+ 1,76 + 7,16 + 1,71 - 4,75 - 0,48
	2516 2517 2518 2519 2520	37 31 50,99 37 36 37,31 26 51 4,48	17,920 17,881 17,873 17,867 17,869	+8,2553 +8,8388 +8,8325 +9,2601 -8,6990	+9,7805 ,7354 ,7360 ,6054 ,8228	1,2533 ,2524 ,2522 ,2521 ,2519	+9,6510 ,6548 ,6556 ,6560 ,6568	4692 4695 4697 4699 4700	- 2,69 - 5,68 - 1,92 - 1,89 - 3,49		+ 0,33 - 0,25 - 0,17 - 7,08 + 5,60

			No.	Right Ascen.	Annual	Logarithms of					
No.	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	<i>b</i>	c	d		
2521 2522 2523 2523 2524 2525	Hydræ Centauri	8 7 8 7.8 6.7	3 2 3 3 2	13 47 50,70 48 25,02 48 45,70 49 1,69 49 3,66	s. +3,376 3,738 3,468 3,408 3,789	—8,8235 8,9451 8,8503 8,8306 8,9610	-8,5309 ,6554 ,5621 ,5440 ,6744	+ 0,5284 ,5726 ,5401 ,5325 ,5785	+8,4790 ,8141 ,5889 ,5159 ,8428		
2526 2527 2528 2529 2530	Centauri ————————————————————————————————————	7.8 7.8 8 7.8 8.9	2 3 3 3	49 23,53 50 22,04 51 18,59 51 34,53 51 43,87	3,471 3,696 3,660 3,367 4,136	-8,8496 8,9245 8,9093 8,8145 9,0658	8,5646 ,6438 ,6328 ,5395 ,7909	+ 0,5404 ,6677 ,6635 ,5272 ,0166	+8,5883 ,7768 ,7465 ,4485 ,0016		
2531 2532 2533 2534 2535	<u> </u>	7.8 6.7 7.8 7.8 7.8	2 3 3 3	51 37,56 51 41,20 51 52,48 52 33,58 52 41,01	3,535 3,684 3,534 3,709 3,986	8,8660 8,8823 8,8650 8,9228 9,0155	-8,5911 ,6077 ,5913 ,6522 ,7451	+0,5484 ,5544 ,5485 ,5693 ,6005	+8,6426 ,6855 ,6402 ,7756 ,9313		
2536 2537 2538 2539 2540	Hydræ Centauri	7.8 7.8 6.7 6	3	53 6,60 53 34,78 53 41,23 53 46,96 54	3,860 3,380 3,616 3,450 3,608	-8,9725 8,8147 8,8878 8,8344 8,8831	-8,7046 ,5486 ,6226 ,6695 ,6215	+0,5866 ,6289 ,5582 ,5578 - ,5578	+8,8650 ,4581 ,7019 ,5464 ,6918		
2541 2542 2543 2544 2544	Spermany, Province of the Control of	6.7 6.7 7 8.9	$\begin{vmatrix} 2\\2 \end{vmatrix}$	55 2,79 55 7,16 55 11,92 55 25,05 56 6,37	3,953 3,955 4,140 4,145 4,182	-8,9963 8,9971 9,0-40 0,0544 9,0629	-8,7373 ,7382 ,7954 ,7969 ,8084	+0,6960 ,6971 ,6170 ,6175 ,6214	+ 8,9038 ,9051 ,9869 ,9875 ,9875		
2540 2540 2540 2540 2540 265	3	7.8 7.8 7.8 7.8	3 3	56 12,44 56 50,07 57 4,50 57 23,02 57 27,86	3,695 3,765 3,512 3,826 3,796	8,9296	-8,6538 ,6731 ,5962 ,6993 ,6895	+0,5676 ,5758 ,5456 ,5827 ,5793	+8,7493 ,7927 ,5958 ,8268 ,8089		
255 255 255 255 255 255	2	7.8 7.8 7 9		57 40,57 57 45,22 58 20,87 58 21,12 58	3,524 4,143 3,517 4,206 3,519	9,0459 8,8454 9,0617	-8,6013 ,7986 ,6007 ,8173 ,6024	+0,5470 ,6173 ,6462 ,6239 ,5464	+8,6049 ,9769 ,5952 ,9985 ,5953		
255 255 255 256 256	7	7. 7 6.7 8 7.	7   3 2 3	59 7,30 59 19,17 59 58,41	3,942 3,522	8,9794 8,8434	8,6542 ,7198 ,7391 ,6057 ,6759	+0,5660 ,5891 ,5957 ,5468 ,6731	+8,7279: ,8501 ,8800 ,5927 ,7638		
250 250 250 250 250	61 Centauri 32	7. 7 8 7. 8	$\begin{bmatrix} 2\\ 3\\ 8 \end{bmatrix}$	0 46,31 0 49,88 1 9,32	3,817 3,770 3,836	8,9352 8,9197 8,9403	,6863 ,7079	,6817 ,5763 ,5839	-1-8,9259 ,8066 ,7778 ,8161 ,9100		

	Declination	Annual		Logarit	hnis of	<del></del>	Diffe	rence from the Right A	ne Brisbane acension	1
No.	(South.) Jan. 1. 1840.	Precession	a'	<i>b'</i>	. c'	d'	No.		om IT	Declin.
2521 2522 2523 2524 2524 2525	26 52 30,03 47 40 38,50 33 11 32,48 28 57 29,74 49 35 10,28		+9,2601 -8,6628 +9,0492 +9,1987 -8,8388	+9,6054 ,8182 ,6875 ,6339 ,8304	—1,2517 ,2511 ,2508 ,2506 ,2506	+9,6573 -,6595 ,6607 ,6620 ,6620	4702 4703 4706 4710 4709		5.	- 7,88 + 3,62 + 7,92 + 2,18 - 0,73
2526 2527 2528 2529 2530	33 11 15,53 45 20 50,98 43 24 58,26 26 28 50,32 59 34 4,43	17,790 17,762 17,735 17,701 17,701	+9,0463 -8,3979 -7,8461 +9,2787 -9,2672	+9,6869 ,7996 ,7837 ,6800 ,8818	-1,2502 ,2492 ,2483 ,2480 ,2480	+ 9,6632 ( ,6666 ,6699 ,6711 ,6711	4711 4716 4720 4726 4721	2,40		+ 0,69 - 0,61 - 1,06 - 7,53
2631 2632 2633 2634 2535	36 33 11,07 45 24 31,45	17,701 17,698 17,690 17,662 17,660	+ 8,8326 + 8,5682 + 8,8325 - 8,5051 - 9,1563	+9,7227 ,7492 ,7210 ,7979 ,8609	-1,2480 ,2479 ,2477 ,2470 ,2470	+9,6711 ,6714 ,6721 ,6744 ,6747	4727 4728 4730 4734 4735	- 1,28 - 1,31 - 0,76 - 2,04 - 2,10		- 2,40 - 1,32 + 3,04 + 2,27 - 5,08
2636 2537 2538 2639 2640	26 4 19,74 40 38 64,96 30 64 44,64	17,637 17,621 17,612 17,610 17,579	-9,0000 +9,2553 +8,2304 +9,1038 +8,3617	-+9;8369 ,5876 ,7579 ,6540 ,7517	-1,2464 ,2450 ,2468 ,2468 ,2450	+9,6766 ,6780 ,6787 ,6789 ,6814	4737 4739 4740 4741 4744	- 2,04 - 3,53 - 1,58 - 2,79		+10,74 + 1,23 - 3,75 - 0,62
2541 2542 2543 2544 2546	58 56 44,68 58 59 3,68	17,551 17,540		-+9,8499 ,8504 ,8753 ,8762 ,8778	1,2444 ,2444 ,2443 ,2440 ,2433	+9,6835 ,6835 ,6837 ,6847 ,6869	4746 4747 4748 4752 4754	+ 1,08 - 2,41 - 2,42 - 2,15 - 1,90		+ 1,97 - 0,93 - 0,98 + 1,48 - 7,80
2546 2647 2648 2549 2650	46 49 12,37 34 7 48,51 49 6 18,71	17,483 17,472 17,457	+8,9242	+9,7827 ,8037 ,6896 ,8187 ,8108	-1,2432 ,2426 ,2423 ,2420 ,2419	+9,6872 ,6892 ,6901 ,6912 ,6914	4756  4760  4764  4767  4768	$\begin{bmatrix} -2,65 \\ -2,52 \\ -1,25 \end{bmatrix}$		+ 3,81 + 3,58 - 1,03 + 0,69 + 4,34
2651 2652 2653 2554 2668	2 58 30 36,45 34 11 0,76 4 69 49 3,80	17,443 17,417	+8,9085 9,3222	+9,6956 ,8706 ,6888 ,8758 ,6887	-1,2417 ;2416 ,2410 ,2409 ,2406	+9,6926 ,6923 ,6943 ,6946 ,6959	4770 4769 4775 4774 4776	- 2,61 - 1,28 - 2,35 - 1,68		- 1,72 - 0,86 + 0.30 - 9,60
2556 255 255 255 265 266	7 60 44 29,01 8 62 40 17,49 9 34 7 4,72	17,382 17,374 17,347	-9,1238	+9,7700 ,8272 ,8386 ,6866 ,7880	-1,2403 ,2401 ,2399 ,2392 ,2392	+9,6963 ,6970 ,6976 ,6996	4777 4778 4779 4782 4783	$\begin{bmatrix} -2,74 \\ -2,10 \\ -1,62 \end{bmatrix}$		+ 0,07 + 1,60 + 1,38 + 1,59 - 4,06
256 256 256 256 256 256	2 48 1 5,20 3 46 9 2,15 4 48 40 26,93	17,309 17,303 17,295	8,9294 8,7993 8,9731	+9,8635 ,8078 ,7944 ,8118 ,8473	-1,2386 ,2383 ,2381 ,2379 ,2372	+9,7014 ,7024 ,7029 ,7035 ,7065	4785 4787 4789 4792 4793	$ \begin{array}{r} -2,68 \\ +1,98 \\ -2,10 \end{array} $		- 4,40 + 6,61 + 0,27 + 9,88 - 3,20

No.	Names,	Mag	No.	Right Ascen.	Annual		Logari	thms of	
I No.	. Hames,	Mag	Obs	Jan. 1, 1840.	Precesn	a	b	c	
2566 2567 2568 2569 2570	Centauri	7,8	3 2 3	и. м. s. 14 2 2 33,60 2 51,43 2 3 3,28	* +4,051 3,971 4,006 4,041 3,661	-9,0034 8,9781 8,9877 8,9983 8,8794	-8,7755 ,7520 ,7627 ,7733 ,6551	+0,6076 ,5989 ,6027 ,6065 ,5636	-1-8,9183 ,8801 ,8951 ,9111 ,6957
2571 2672 2573 2574 2575	Centauri Lupi Centauri X Libro	7.8 7.8 7.8 5.6 6	3 9 2 3	3 7,37 3 30,80 3 39,47 3 52,31 4 5,35	3,645 3,761 3,900 4,103 3,403	-8,8740 8,9007 8,9629 9,0131 8,8025	8,6502 ,6873 ,7312 ,7928 ,5827	+0,5617 ,5763 ,5911 ,6131 ,5319	+8,6830 ,7611 ,8399 ,9335 ,4425
2576 2677 2678 2579 2580	Centauri	7.8 7.8 7.8 7.8	2 - 1 1 2	4 36,81 4 5 11,92 5 23,14 5 30,14	3,980 4,150 3,655 4,123 3,640	-8,9743 9,0263 8,8721 9,0139 8,8667	8,7570 ,8069 ,6571 ,7998 ,6529	+0,5999 ,6180 ,5629 ,6152 ,5611	-+8,8754 ,948-1 ,6817 ,9354 ,6690
2581 2582 2583 2584 2585	Centauri•	7 6 7.8 8 7.8	21 3 3 2	5 31,40 5 47,01 6 25,66 6 55,73 6 55,89	3,747 3,449 4,071 4,130 3,497	8,8999 8,8109 8,9956 9,0108 8,8217	-8,6864 ,5985 ,7860 ,8032 ,6141	-+0,5737 ,5377 ,6097 ,6159 ,5437	+8,7438 ,4903 ,9091 ,9317 ,,5377
2586 2587 2588 2589 2690	Centauri	7.8 8.9 7 7.8 7.8	2 1 3 1 3	7 30,44 7 39,55 7 47,44 7 48,31 8 6,84	4,198 4,021 4,230 3,665 4,088	-9,0280 8,9770 9,0355 8,8688 8,9951	8,8220 ,7725 ,8319 ,6649 ,7925	+0,6280 ,6048 ,6263 ,5641 ,6115	+8,9562 ,8816 ,9668 ,6781 ,9098
2591 2592 2593 2594 2595	Centauri V	8 6 7.8	3-3	8 8 8 43,16 9 11,71 9 11,75	4,285 3,691 4,142 4,116 4,092	9,0493 8,8746 9,0086 8,9992 8,9927	8,8477 ,6741 ,8083 ,8014 ,7947	+0,6819 ,5671 ,6172 ,6145 ,6119	-J-8,9857 ,6930 ,9293 ,9161 ,9064
2596 2597 3598 2599 2600	Centauri Lupi Centauri Lupi	8 7 6.7 7 8	3 1 1 2 1	9 12,63 9 18,40 9 45,15 10 5,09 10 27,34	4,204 3,793 3,595 3,593 3,888	9,0239 8,9039 8,8435 8,8423 8,9291	-8,8261 ,7064 ,6479 ,6479 ,7363	+0,6237 ,5790 ,5557 ,5555 ,5897	+8,9513 ,7562 ,6166 ,6129 ,8045
2601 2602 2603 2604 2005	£	7.8 7.8 7.8 7.8	2 3 2 -	10 32,50 10 40,85 10 51,20 10 11 4,63	3,776 4,205 3,712 3,596 3,556		8,7030 ,8277 ,6840 ,6501 ,6393	+0,5770 ,6238 ,5696 ,5558 ,5510	1-8,7409 ,9467 ,6986 ,6123 ,6768
2606 2607 2608 2609 2610	Lupi	5,6 6.7 8.9 9.10	3 1 1 3	11 13,84 11 39,16 11 44,88 11 54,74 12 2,43	4,217 4,096 4,117 3,770 3,637	9,0208 8,9859 8,9916 8,8899 8,8504	8,8314 ,7982 ,8041 ,7033 ,6643	+0,6250 ,6124 ,6146 ,5763 ,5607	+8,9481 ,8978 ,9063 ,7313 ,6394

	T. 11 .1	<del></del>	<del></del>	T 1	1	<del> </del>	II Differ	rence from t	he Brisbane	Catalogue.
No.	Declination (South.)	Annual		Logaru	thms of			Right A	scension	
	Jan. 1. 1840.	Precession	a' .	<i>b'</i>	c'	d'	No.	M.C.	om   T.	Declin,
2566 2567 2568 2569 2570	55 16 52 54 31,61 53 52 10,11 54 52 40 53 13,45	-17,247 17,230 17,218 17,218 17,211	-9,2355 9,1643 9,1969 9,2279 7,8451	+9,8497 ,8363 ,8415 ,8469 ,7501	—1,2367 ,2363 ,2360 ,2360 ,2368	+9,7070 ,7082 ,7091 ,7091 ,7095	4794 4798 4800 4801 4802	$ \begin{array}{r}                                     $	3,74	+ 1,25 + 0,74 + 0,12
2571 2572 2573 2574 2575	40 4 45,39 45 13 58,43 50 24 32,18 56 19 55,89 25 51 28,00	17,206 17,191 17,182 17,170 17,164	+7,3010 -8,7708 -9,0828 -9,2765 +9,2175	-1-0,7427 ,7847 ,8201 ,8532 ,5727	1,2357 ,2353 ,2361 ,2348 ,2346	+9,7099 ,7110 ,7116 ,7125 ,7129	4803 4805 4808 4810 4812			- 5,77 - 1,16 - 3,72 + 0,75 - 1,74
2576 2577 2578 2579 2580	52 46 29,74 57 17 40 9 1,68 56 32 50,40 39 20 52,63	17,137 17,128 17,112 17,103 17,100	-9,1790 -9,3075 -7,6021 -9,2923 +7,6990	+9,8331 ,8569 ,7409 ,8526 ,7333	-1,2339 ,2337 ,2333 ,2331 ,2330	+9,7148 ,7154 ,7164 ,7170 ,7173	4815 4817 4819 4820 4821	$\begin{array}{r} -0.04 \\ -2.17 \\ -2.41 \\ -2.83 \end{array}$		- 2,32 - 5,61 - 3,08 + 4,30
2581 2582 2583 2584 2585	44 14 37,48 28 31 47,72 55 1 7,62 66 25 37,79 31 18 32,80	17,097 17,085 17,054 17,033 17,033	-8,7243 +9,1173 -9,2677 -9,2988 +8,9868	+9,7748 ,6100 ,8434 ,8602 ,6454	-1,2329 ,2326 ,2318 ,2313 ,2313	+9,7175 ,7183 ,7200 ,7218 ,7218	4822 4824 4825 4828 4829	- 1,81 - 0,61 - 2,27 - 3,59 - 1,11		$\begin{array}{r} + 2,24 \\ - 1,13 \\ + 7,89 \\ + 4,25 \\ - 2,63 \end{array}$
2586 2587 2588 2589 2590	57 66 23,83 53 22 57,79 68 35 51,80 40 6 57,99 55 8 21,16	17,005 16,999 16,990 16,993 16,978	-9,3404 9,2201 9,3560 8,0000 9,2742	+9,8569 ,8331 ,8596 ,7376 ,8423	—1,2306 ,2304 ,2302 ,2303 ,2299	-1-9,7236 ,7240 ,7246 ,7244 ,7254	4830 4832 4833 4834 4836	- 2,09 - 3,02 - 1,39 - 1,60 - 1,90		- 1,65 + 3,99 - 8,81 - 4,35 - 7,11
2691 2592 2593 2594 2695	59 42 41 8 56 24 52,33 55 38 41,84 65 3 7,99	16,975 16,956 16,953 16,924 16,928	-9,3802 8,3802 9,3096 9,2945 9,2810	+9,8642 ,7458 ,8481 ,8434 ,8404	—1,2298 ,2293 ,2292 ,2285 ,2286	+9,7256 ,7268 ,7270 ,7288 ,7286	4837 4841 4839 4847 4845	- 3,88 - 1,14 - 2,26	- 0,60	+ 2,84 - 1,64 - 6,18
2596 2597 2598 2599 2600	57 46 24,86 45 2I 28,15 36 15 29,90 36 •6 58,03 48 37 32,25	16,924 16,921 16,900 16,887 16,868	-9,3463 -8,8808 +8,5051 +8,5185 -9,0719	+9,8541 ,7789 ,6981 ,6962 ,8006	1,2286 ,2284 ,2279 ,2275 ,2271	+9,7288 ,7290 ,7304 ,7312 ,7324	4844 4849 4861 4857 4858	2,87 - 2,61 - 0,10 - 1,63 - 2,30		+ 4,95 - 5,13 - 2,24 + 0,69 + 8,76
2601 2602 2603 2604 2606	44 26 37,44 57 33 8,60 41 41 5,36 36 7 33 56 17,64	16,865 16,856 16,856 16,852 16,840	-8,8325 -9,3502 -8,5563 +8,4914 +8,7559	+9,7706 ,8512 ,7478 ,6955 ,6716	-1,2270 ,2267 ,2267 ,2266 ,2263	+9,7326 ,7332 ,7332 ,7334 ,7342	4869 4860 4861 4862 4866	- 2,74 - 2,82 - 7,09 - 2,36		$ \begin{array}{c} + 3,70 \\ - 1,52 \\ - 1,80 \\ + 5,99 \end{array} $
2606 2607 2608 2609 2610	57 43 22,20 54 41 43,78 55 13 37,35 43 55 14,25 37 56 33,83	16,830 16,815 16,808 16,798 16,792	9,3560 9,2856 9,3010 8,8195 +7,7781	+9,8514 ,8355 ,8383 ,7647 ,7122	-1,2261 ,2267 ,2256 ,2263 ,2261	+9,7347 ,7359 ,7361 ,7367 ,7371	4864 4867 4868 4870 4871	- 2,64 - 0,94 - 2,74 - 1,23 - 0,49		$ \begin{array}{c c} - & 0.21 \\ - & 6.84 \\ + & 4.95 \\ 0.00 \\ + & 0.61 \end{array} $

1		<u> </u>	NT.	Dialet Agen	Annual	· · · · · · · · · · · · · · · · · · ·	Logari	thms of	and the state of t
No.	Names.	Mag.	No. Obs.	Right Ascen. Jan. 1, 1840.	Precesu,	α	1 6		d
2611 2612 2613 2614 2614	Lupi Centauri Hydræ Lupi Centauri	7 9.10 8 7.8 7	1 2 1 1 3	H. M. S. 14 12 13,56 12 17,77 12 28,54 12 42,90 13 16,46	s. + 3,867 - 4,113 - 3,434 - 3,943 - 3,719	8,9181 ,9971 ,7952 ,9388 ,8714	8,7325 ,8121 ,6107 ,7555 ,6902	+ 0,5874 ,6173 ,5358 ,5958 ,5704	+8,7864 ,9148 ,4462 ,8235 ,6929
2616 2617 2618 2619 2620	Centauri Lupi Hydræ Centauri	8 8 7 8 7.8	3 1 1 2 2	14 18,97 14 34,04 14 36,35 14 35,40 14 48,63	4,098 4,176 3,831 3,478 3,692	-8,9782 ,9988 ,9007 ,8020 ,8597	8,8014 ,8231 ,7251 ,6261 ,6849	+0,6125 ,6208 ,5833 ,5413 ,6673	+8,8878 ,9185 ,7563 ,4872 ,0682
2621 2622 2623 2624 2625	Centauri  Hydræ Centauri Lupi	7 7.8 7.8 7.8	3 4 3 2	15 17,09 15 22,48 16 8,55 16 12,48 16	3,624 4,286 3,469 3,732 3,783	8,8393 9,0252 8,7968 8,8682 8,8822	8,6664 ,8529 ,6274 ,6991 ,7134	+0,5592 ,6320 ,5402 ,5719 ,5778	+8,6102 ,9562 ,4710 ,6905 ,7211
2626 2627 2628 2629 2630	Centauri Lupi Centauri	7 6.7 6.7 7.8	I 1 1 3	16 16 45,90 16 56,08 16 56,28 17 6,39	4,294 3,673 3,832 3,681 4,298	9,0240 8,8496 8,8948 8,8515 9,0226	8,8557 ,6826 ,7286 ,6853 ,8573	+0,6929 ,5650 ,5834 ,5600 ,0333	+8,9549 ,6107 ,7476 ,0519 ,9534
2631 2632 2633 2634 2635	Centauri Lupi Centauri	8 7.8 8 7 7.8	3 5 2 1 2	17 32,67 17 34,30 17 46,27 17 52,09 17 8,48	4,129 3,789 4,167 3,593 3,664	-8,9703 ,8805 ,9860 ,8250 ,8437	8,8120 ,7171 ,8234 ,6627 ,6825	4-0,6158 ,5785 ,6198 ,5555 ,5640	+8,8871 ,7193 ,9016 ,5809 ,6345
2636 2637 2638 2639 2640	Lupi Gentauri Lupi	7 8 8 6 7.8	2 2 1 2 2	18 23,84 18 42,19 18 43,66 19 43,80 19 68,86	3,892 4,173 3,957 3,944 3,788	8,9077 ,9847 ,9252 ,9187 ,8740	-8,7475 ,8259 ,7667 ,7640 ,7203	(+0,5902 ,6204 ,5974 ,5959 ,5784	+8,7739 ,9004 ,8057 ,7953 ,7091
2641 2642 2643 2644 2645	Lupi Centauri	7,8 7.8 7.8 6.7	3 2 2 3 - 3	20 51,80 20 59,93 21 8,43 21 16,76 21 18,43	3,878 3,898 4,223 4,164 3,676	8,8970 ,9021 ,9900 ,9740 ,8398	8,7468   ,7527   ,8411   ,8257   ,6912	+0,5886 ,5908 ,6256 ,6195•	+8,7567 ,7666 ,9096 ,8861 ,6309
2646 2647 2648 2649 2660	Lupi Centauri σ Lupi	7.8 7.8 8 5.6	1 2 2 2 2	21 30,90 21 36,15 21 35,04 21 56,91 21 52,74	3,820 4,035 3,591 4,315 3,986	-8,8787 8,9386 8,8161 9,0122 8,9242	-8,7314 ,7913 ,6688 ,8649 ,7780	+0,5821 ,6058 ,5552 ,6350 ,6005	+8,7214 ,8308 ,5635 ,9412 ,8070
2651 2652 2653 2654 2655	Lupi Centauri Lupi	6.7 8 7.8 7.8 9	2 3 3 3 3	22 32,16 22 50,19 23 24,48 23 26,64 23 36,90	4,065 3,764 4,390 3,874 3,874	-8,9440 8,8601 9,0246 8,8888 8,8888	8,8005 ,7177 ,8848 ,7490 ,7490	+0,6091 ,6756 ,6425 ,5882 ,5882	-1-8,8404 -,6833 -,9592 -,7441 -,7441

	Declination.	A 1	<u> </u>	Logarit	hms of		Diffe		ne Brisbane scension	Catalogue.
No.	1 1 1 1 2	Annual Precession	a'	<i>b'</i>	c'	$\overline{d'}_{}$	No.		T.	Declin.
2611 2612 2613 2614 2615	47 35 1,26 55 47 55,21 26 35 3,50 50 2 21,22 41 31 7,87	76,786 16,779 16,773 16,760 16,735	-9,0414 -9,3181 +9,1563 -9,1492 -8,6021	+9,7913 ,8405 ,6737 ,8070 ,7432	-1,2249 ,2248 ,2246 ,2243 ,2236	+9,7375 ,7378 ,7382 ,7390 ,7405	4873 4872 4877 4878 4884	s. - 2,33 - 3,49 - 0,81 - 2,04 - 2,54	- 2,79 	+ 3,21 + 1,01 + 0,61 - 3,31 - 4,27
2616 2617 2618 2619 2620	54 17 12,26 56 11 35,82 46 47 54,44 28 50 38,39 40 1 28,44	16,683 16,670 16,670 16,673 16,660	-9,2946 -9,3424 -8,9823 +9,0458 -8,4161	+9,8298 ,8397 ,7756 ,6052 ,7283	-1,2223 ,2219 ,2219 ,2220 ,2217	+9,7436 ,7444 ,7444 ,7442 ,7449	4890 4891 4894 4895 4897	- 2,23 - 3,30 - 2,83 - 3,28 - 2,53		- 3,79 - 3,12 + 1,22 - 0,86 - 4,05
2621 2622 2623 2624 2624 2625	36 42 57,74 58 30 33,89 28 9 49,70 41 35 19,39 43 36	16,638 16,031 10,695 16,692 16,689	+8,1761 -9,3962 +9,0719 -8,6812 -8,8633	+9,6961 ,8499 ,5925 ,7402 ,7568	-1,2211 ,2209 ,2200 ,2199 ,2198	+9,7462 ,7466 ,7487 ,7489 ,7491	4900 4898 4905 4904 4906	- 0,84 - 1,46 - 1,53 2,34		+54,08 $-0,19$ $-0,61$ $-1,82$
2626 2627 2628 2629 2630	58 30 38 47 43,25 45 24 21,90 39 8 49,19 58 28 24,33	16,582 16,566 16,556 16,556 16,646	9,4014 8,1761 8,9823 8,3010 9,4048	+9,8486 ,7144 ,7698 ,7175 ,8475	-1,2196 ,2192 ,2189 ,2189 ,2187	+9,7494 ,7504 ,7509 ,7509 ,7515	4907 4908 4909 4911 4912	- 2,68 - 2,36 - 1,78 - 2,20	}	+ 6,10 - 2,37 + 1,33 0,00
2631 2632 2633 2634 2635	55 24 57,19 34 43 18,79	16,523 16,523 16,513 16,510 16,497	-9,3201 -8,8808 -9,3444 +8,5315 -8,0000	+9,8269 ,7650 ,8316 ,6717 ,7063	-1,2181 ,2181 ,2178 ,2177 ,2174	+9,7529 ,7528 ,7535 ,7535 ,7542	4915 4916 4917 4919 4921	- 1,81 - 1,44 - 2,85 - 2,34 +57,71	- <del>2,15</del>	- 2,31 - 0,05 - 8,03 - 2,76 - 7,11
2636 2637 2638 2639 2640	55 24 41,41 49 23 18,89 48 47 51,70	16,467 16,464 16,417	9,0934 9,3483 9,1790 9,1643 8,8808	+9,7814 ,8303 ,7951 ,7899 ,7481	-1,2170 ,2166 ,2185 ,2163 ,2149	,7560 ,7586	4922 4923 4924 4928 4931	$\begin{array}{c c} - 2,34 \\ + 1,78 \\ - 2,22 \end{array}$		$ \begin{vmatrix} + 0.69 \\ - 7.35 \\ - 3.12 \\ + 2.48 \\ + 1.82 \end{vmatrix} $
264 264 204 264 264	2 47 1 1,79 3 56 10 21,42 4 54 44 58,83	16,350 16,343 16,336	9,3802 9,3483	,8310 ,8233	,2135 ,2133 ,2131	,7622 ,7625 ,7629	4936 4936 4937 4938 4940	$\begin{vmatrix} - & 1,49 \\ - & 2,10 \end{vmatrix}$		+ 3,09 + 6,07 - 1,22 - 0,24 + 0,27
264 264 264 264 264	6 44 5 27,5 7 51 15 23,18 8 33 57 53,09 9 58 6 25,1	16,323 2 16,323 5 16,323	$ \begin{array}{c c} -9,2601 \\ +8,5563 \\ -9,4216 \end{array} $	,8031 ,658 <b>2</b> ,8399	,2128	,7636 ,7636 ,7636	494   494   494	$\begin{vmatrix} -3,39 \\ 3 \end{vmatrix} - 1,85$		$ \begin{array}{c c} + 1,51 \\ + 1,07 \\ + 6,45 \\ + 3,86 \\ + 0,40 \end{array} $
265 265 265 265	51 57 59,3 2 41 41 31,2 3 59 18 20,5 4 45 45 11,6	$egin{array}{c c} 3 & 16,269 \ 8 & 16,227 \ 5 & 16,227 \ \hline \end{array}$	8,8129 7 9,4533 7 9,0682	7329 ,8429 2 ,7637	210	7668,   7 7086 7686,   7	495 495 495	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		$\begin{array}{c c} + 1,48 \\ - 2,94 \\ - 3,38 \\ - 1,22 \\ - 8,39 \end{array}$

No.	Names,	Mag	No.	Right Ascen.	Annual		Logari	thms of	<del></del>
	21(11)00(	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	, b	° c ·	
2656 2657 2658 2659 2660	Centauri Lupi Centauri Lupi Centauri	7 8 7.8 7.8 8	1 3 2 2 3	11. M. S. 14 23 44,08 24 8,80 25 7,46 25 21,49 25 22,66	+ 4,228 3,873 3,654 3,893 3,859	8,9829 ,8865 ,8248 ,8889 ,8796	-8,8444 ,7496 ,6917 ,7565 ,7474	+0,6261 ,5880 ,5628 ,5903 ,6865	+8,9009 ,7406 ,5994 ,7468 ,7285
2661 2662 2663 2664 2665	Lupi Centauri Lupi Centauri	6.7 7 7.8, 7	3 Q 3 3 Q	26 8,90 26 26,05 27 12,50 27 18,90 27 23,37	4,102 3,712 4,374 3,939 3,802	8,9428 8,8370 9,0082 8,8959 8,8586	-8,8139 ,7092 ,8835 ,7714 ,7344	+0,6130 ,5696 ,6409 ,5954 ,5800	+8,8416 ,6351 ,9387 ,7625 ,6878
2666 2667 2668 2669 2670	Lupi Centauri Lupi Centauri	7 6.7 7 7	2000 2000	27 31,83 26 43,54 27 46,48 28 21,81 28 41,44	3,999 3,731 3,878 3,701 3,626	-8,9115 ,8394 ,8782 ,8294 ,8093	-8,7878 -,7155 -,7556 -,7094 -,6904	+0,6019 ,5718 ,5886 ,5683 ,5594	+8,7907 ,6433 ,7292 ,6198 ,5636
2671 2672 2673 2674 2675	Lupi Contauri Lupi	7 7.8 7.8 7	2 - 1 2 3	28 44,47 28 29 7,77 29 11,02 29 52,22	3,978 3,977 3,897 3,634 3,885	—8,9026 ,9021 ,8796 ,8103 ,8746	-8,7836 ,7832 ,7622 ,6932 ,7601	+0,5997 ,5996 ,5907 ,5604 ,6894	+8,7762 ,7766 ,7338 ,5681 ,7249
2676 2677 2678 2679 2680	Contauri Lupi Contauri Lupi	6.7 7.8 7 4	1 2 1 3	30 5,86 30 30 12,51 31 13,84 31 19,39	4,370 3,903 3,760 3,936 3,939	-8,9980 ,8776 ,8380 ,8841 ,8849	-8,8845 ,7057 ,7288 ,7761 ,7762	+0,6405 ,5914 ,5752 ,5951 ,5954	+8,9262 ,7318 ,6476 ,7454 ,7471
2681 2682 2683 2684 2685	Centauri Lupi	7.8 7 7.8 7	20021	30 26,28 31 54,25 32 18,93 32 20,27 32	3,755 3,812 3,626 3,650 3,92I	—8,8362 ,8499 ,7780 ,7833 ,8766	-8,7279 ,7435 ,6729 ,6784 ,7728	+0,6746 ,5811 ,5473 ,5502 ,6934	+8,6435 ,6764 ,4640 ,4859 ,7328
2686 2687 2688 2689 2690	Lupi Centauri Libræ	7.8 7.8 7.8 9 7	2 2 2 2	32 36,99 33 5,46 33 42,06 33 49,63 33 59,70	3,952 4,385 4,253 4,254 3,445	8,8846 ,9919 ,9581 ,9581 ,7575	-8,7809 ,8902 ,8687 ,8592 ,6589	+0,5968 ,6420 ,6287 ,6288 ,5372	+8,7479 ,9195 ,8711 ,8712 ,3725
2691 2692 2698 2694 2696	Centauri Lupi Oentauri	7 8 6.7 7 6.7	2 1 2 2 1	35 31,04 35 47,45 35 49,09 35 53,50 37 4,24	3,885 4,189 3,963 4,134 3,721	8,8592 ,9360 ,8787 ,9221 ,8137	8,7668 ,8446 ,7875 ,8310 ,7272	+0,5894 ,6221 ,5980 ,6164 ,5707	+8,7026 ,8390 ,7413 ,8170 ,5994
2696 2697 2698 2699 2700	Centuari	7 6.7 7 7.8	2 1 2 2 2	37 9,93 37 11,14 37 27,94 37 41,01 38 40,78	3,855 4,465 4,327 3,762 3,670	-8,8473 ,9971 ,9643 ,8226 ,7974	-8,7614 ,9114 ,8796 ,7384 ,7178	+0,5860 ,6498 ,6362 ,5754 ,5647	+8,6803 ,9290 ,8829 ,6239 ,5579

	Declination	Annual -	<u></u>	Logarit	hms of		Diffe	· <del> </del>	lle Brisbane Ascensión	Catalogue.
No.	(South.) Jan. 1. 1840.	Precession	a'	<i>b</i> '	c' .	d'	No.		rom	Deolin.
2656 2657 2658 2659 2660	55 51 15,14 45 35 45,34 36 29 51,68 48 6 35,36 44 54 44,75	-16,211 16,190 16,141 16,131 16,127	9,3874 9,0682 7,6021 9,1038 9,0492	+9,8258 ,7614 ,6806 ,7636 ,7546	-1,2098 ,2092 ,2079 ,2077 ,2076	+9,7694 ,7704 ,7728 ,7734 ,7735	4957 4961 4965 4966 4966	$ \begin{array}{c c}  & s \\  & 2,15 \\  & 0,07 \\  & 2,78 \\  & 2,70 \\  & 2,94 \end{array} $		- 1,58 - 0,07 - 3,17 - 2,70 - 2,22
2661 2662 2663 2664 2665	52 21 24,63 38 53 30,09 58 26 8,90 47 19 20,31 42 24 38,71	16;086 16;072 16;030 16;027 16;023	9,3160 8,6682 9,4533 9,1703 8,9294	+9,8033 ,7022 ,8335 ,7695 ,7310	-1,2064 ,2061 ,2049 ,2048 ,2047	+9,7756 ,7763 ,7783 ,7784 ,7786	4972 4973 4975 4977 4978	- 1,02 - 1,82 - 2,95 - 2,00 - 3,38		+0,30 - 0,40 - 1,34 - 0,08 - 1,36
2666 2667 2668 2669 2670	49 11 69,27 39 30 29,80 45 10 13,92 38 6 36,31 34 34 37,23	16,016 16,020 16,002 15,967 15,953	-9,2355 -8,6721 -9,0828 -8,5051 +8,1139	+9,7818 ,7065 ,7532 ,6918 ,6551	-1,2045 ,2046 ,2042 ,2032 ,2028	+9,7790 ,7788 ,7796 ,7813 ,7820	4979 4981 4982 4985 4992	$-\frac{3,22}{-\frac{2,64}{0,93}}$	3,71 m 3,71 m 2 m 3 m m 3 m m	+ 6,69 - 4,90 + 0,83 + 3,63 - 4,45
2671 2672 2673 2674 2675	48 21 5,80 48 19 45 36 9,93 34 53 41,96 45 5.55,73	15,953 15,953 15,931 15,928 15,893	-9,2148 -9,2122 -9,1173 +7,9542 -9,1008	+9,7746 ,7742 ,7546 ,6579 ,7490	-1,2028 ,2028 ,2023 ,2022 ,2012	+9,7820 ,7820 ,7830 ,7831 ,7848	4989 4988 4993 4994 4998	$ \begin{array}{r}  -1,64 \\  -3,00 \\  -2,35 \\  -2,97 \end{array} $	St.	$ \begin{array}{c c} + & 5,19 \\ + & 8,77 \\ - & 5,82 \\ - & 1,61 \end{array} $
2676 2677 2678 2679 2680	46 34 57,84	15,878 15,857 15,821 15,818 15,814	-9,4579' -9,1271 -8,8062 -9,1703 -9,1732	+9,8271 ,7525 ,7069 ,7585 ,7592	-1,2008 ,2002 ,1992 ,1991 ,1990	+9,7854 ,7864 ,7880 ,7882 ,7884	4999 5003 5006 5005 5007	$ \begin{array}{r}  -1,49 \\  +56,45 \\  -2,73 \\  -2,76 \end{array} $	10:20	$ \begin{array}{r}  -0.04 \\  -4.47 \\  -3.50 \\  +2.53 \end{array} $
2681 2682 2683 2684 2685	42 5 52,25 29 0 21,40 30 14 35,56	15,807 15,782 15,764 15,760 15,746	-8,7924 -8,9590 +8,8976 +8,8062 -9,1623	+9,7044 ,7 <del>2</del> 27 ,5818 ,5983 ,7514	-1,1988 ,1982 ,1977 ,1976 ,1972	+9,7887 ,7898 ,7906 ,7908 ,7914	5008 5010 5013 5014 5017	+59,61 - 2,27 - 3,63 - 2,99		-18,50 - 4,28 + 4,84 - 3,82
2686 2687 2688 2689 2690	57 47 24,08 54 55 6,89 54 55 28,18	15,742 15,717 15,684 15,677 15,674	$ \begin{array}{r}                                     $	+9,7586 ,8220 ,8065 ,8064 ,5082	-1,1971 ,1964 ,1956 ,1953 ,1962	+9,7916 ,7927 ,7941 ,7945 ,7946	5016 5021 5024 5026 5031	- 1,74 - 1,56 - 2,21 - 1,99 - 3,04	- 0,51	+ 1,12 + 1,17 - 6,16 - 3,13 + 0,44
2691 2692 2693 2694 2694	53 5 35,93 3 46 45 36,84 4 51 41 59,90	15,571 15,568 15,568	-9,1038 $-9,3877$ $-9,2095$ $-9,3622$ $-8,6336$	+9,7341 ,7934 ,7629 ,7861 ,6742	-1,1927 ,1923 ,1922 ,1922 ,1904	+9,7984 ,7990 ,7992 ,7992 ,8020	5041 5043 5045 5044 5052	-1,46 $-3,50$	<b>-</b> 2,08	+ 3,83 - 0,58 + 2,55 + 0,94 - 3,07
2696 2696 2698 2698 2706	7 58 43 51 48 3 55 59 19,49 3 14 56,56	15,490 15,476 15,468	-9,4533 -8,8195	+9,7212 ,8200 ,8064 ,6889 ,6464	.1894	,8024 ,8030 ,8034	∫  5058	$\begin{bmatrix} -2,66 \\ -2,06 \\ -2,24 \end{bmatrix}$	0,54	12

No.	"Names.		Mag.	No.	Right Ascen.	Aunual		Logari	thms of	
	Trumes.		urug.	Obs.	Jan. 1, 1840.	Precesn,	а	ь	C	d •
2701 2702 2703 2704 2705	Centauri Lupi Centauri Lupi		7 8 8 7	1 2 2 3	11. M. s. 14 38 44,02 38 57,55 39 10,72 40 38,00 40	s. +3,688 4,018 3,666 3,850 3,855	-8,8017 ,8837 ,7951 ,8363 ,8380	- 8,7217 ,8047 ,7169 ,7648 ,7654	4+ 0,5668 ,6040 ,5641 ,5855 ,5860	+8,5707 ,7546 ,5526 ,6639 ,6664
2706 2707 2708 2709 2710	Centauri Lupi Centauri		7 9,10 7,8 6,7	3 - 33	40 41 42,94 42 42 45,38 42 50,41	3,823 3,970 3,942 3,947 3,730	-8,8300 ,8641 ,8541 ,8554 ,8017	-8,7574 ,7956 ,7897 ,7910 ,7376	+ 0,5824 ,5988 ,5957 ,5963 ,5717	+8,6484 ,7219 ,7040 ,7065 ,5828
2711 2712 2713 2714 2715	T.upi Circini Lupi Circini		6,7 6,7 8 8	2 3 3 -	43 2,41 43 18,54 44 1,60 44 7,57	3,571 4,552 3,639 3,638 3,948	-8,7651 ,9963 ,7779 ,7774 ,8508	8,7014 ,9342 ,7181 ,7181 ,7932	+0,5528 ,6582 ,5610 ,5609 ,5964	+8,4632 ,9815 ,5146 ,5135 ,7003
2716 2717 2718 2719 2720	Lupi Hydræ Lupi	*.	6 6.7 8 6.7	1 1 1 1 2	44 37,96 44 53,40 44 67,06 45 22,33 46 42,53	3,651 3,531 4,204 4,344 4,025	-8,7791 ,7527 ,9120 ,9434 ,8667	-8,7216 ,6962 ,8560 ,8589 ,8133	+0,5624 ,5479 ,6237 ,6379 ,6048	+8,5210 ,4203 ,8096 ,8583 ,7826
2721 2722 2723 2724 2726	c Lupi		7 7 7 7.8	1 2 2 2	45 51,34 46 26,85 46 47,35 47 12,18 48	4,154 3,782 3,624 4,066 4,133	-8,8976 ,8053 ,7681 ,8721 ,8859	-8,8449 ,7549 ,7190 ,8248 ,8416	+0,6185 ,6777 ,5592 ,6092 ,6163	+8,7869 ,6021 ,4924 ,7446 ,7698
2726 2727 2728 2729 2730	Lupi Centauri Lupi		7 7.8 7.8 7	3 3 3 4 4	48 5,12 48 13,43 48 51,00 49 9,67 49 16,10	4,172 4,070 3,902 3,752 3,913	8,8950 ,8702 ,8279 ,7917 ,8294	-8,8509 ,8267 ,7866 ,7514 ,7899	-1-0,6203 ,6096 ,5913 ,5743 ,5925	+8,7852 ,7427 ,6604 ,5736 ,6647
2731 2732 2733 2734 2735	Lupi		7 7 9.10 8 7	2 3 2 2 3	49 47,37 49 51,43 48 52,27 50 38,39 51 6,31	4,389 3,591 3,838 4,199 3,763	-8,9397 ,7641 ,8097 ,8940 ,7892	8,9022 ,7167 ,7728 ,8593 ,7566	+0,6424 ,5552 ,5841 ,6231 ,6765	+8,8563 ,4542 ,6218 ,7863 ,5730
2736 2737 2738 2739 2740	Circini Lupi		7 7,8 7,8 6,7	4 2 3 3	52 62 24,00 52 25,44 53 35,70 54 59,54	4,471 4,481 4,439 3,720 4,105	8,9498 ,9516 ,9424 ,7731 ,8589	8,9220 ,9240 ,9151 ,7497 ,8410	+0,6504 ,6514 ,6473 ,5705 ,6133	+8,8730 ,8756 ,8625 ,6363 ,7318
2741 2742 2743 2744 2744	Hydres Circini Lupi Circini		7.8 7.8 7 7.8 7.8	3 3 3 2 2	55 0,94 55 12,79 55 31,78 55 53,89 65 54,46	3,563 4,706 4,231 3,603 4,747	-8,7350 ,9896 ,8861 ,7428 ,9952	8,7170 ,9726 ,8705 ,7282 ,9811	+0,5506 ,6726 ,6264 ,5567 ,6764	+8,4020 ,9293 ,7792 ,4412 ,9372

3.7	Declination.	Annual	]	Logar	ithms of			Right A	the Brisbane Ascension	1
No.	(South.) Jan. 1. 1840.	Precession	a'	b'	c'	d'	No	M.C.	om   T.	Deolin.
2701 2702 2703 2704 2705	35 57 34,67 47 57 47,56 34 52 39,67 42 9 11,69 42 19	-15,408 15,394 15,382 15,300 15,300	-8,3979 -9,2695 -8,0414 -9,0492 -9,0569	+9,6549 ,7564 ,6426 ,7098 ,7112	-1,1878 ,1873 ,1970 ,1847 ,1847	+9,8058 ,8064 ,8069 ,8102 ,8102	5063 5064 5066 5074 5075	3,1,26 	s	- 4,41 - 0,75 - 7,49 + 0,06
2706 2707 2703 2709 2709 2710	41 9 46 5 41,01 45 1 45 11 39,65 37 8 24,15	15,300 15,240 15,179 15,179 15,175	8,9912 9,2227 9,1903 9,1959 8,6902	+9,7011 ,7388 ,7292 ,7304 ,6603	-1,1847 ,1830 ,1°13 ,1812 ,1811	+9,8102 ,8125 ,8149 ,8149 ,8150	5076 5082 5088 5089 5090	$-\frac{2,22}{2,22}$ $-\frac{1,82}{1,94}$		$+\frac{4,87}{4,87}$ $-\frac{0,45}{3,26}$
2711 2712 2713 2713 2714 2715	29 54 50,66 59 27 1,62 33 1 55,49 32 58 54,31 44 58	15,167 15,144 15,110 15,102 15,075	+8,6990 -9,6366 +7,7781 +7,7781 -9,2014	+9,5771 ,8136 ,6140 ,6132 ,7268	-1,1809 ,1802 ,1793 ,1790 ,1783	+9,8153 ,8162 ,8175 ,8178 ,8188	5091 5092 5098 5099 5100	- 1,58 - 1,58 - 1,95 - 0,93	- <del>0.26</del>	- 3,05 - 0,97 + 1,48 + 8,86
2716 2717 2718 2719 2720	33 28 57,12 27 41 22,10 52 9 16,19 55 15 29,97 47 13 26,02	15,076 15,060 15,062 15,029 15,014	7,3010 +8,8865 9,4082 9,4728 9,2810	+9,6182 ,5434 ,7733 ,7899 ,7405	-1,1788 ,1778 ,1776 ,1769 ,1765	+9,8188 ,8194 ,8197 ,8206 ,8211	5105 5103 5110	- 8,44 - 2,84 - 2,28 - 2,05 - 4,94	— <del>1,34</del>	$\begin{array}{c} + & 2,06 \\ - & 0,78 \\ + & 0,12 \\ - & 1,88 \\ - & 0,81 \end{array}$
2721 2722 2723 2724 2724 2725	50 47 35,85 38 45 40,29 31 58 57,95 48 11 51,48 49 55	15,002 14,967 14,948 14,921 14,874	-9,3802 -8,8976 +8,1761 -0,3201 -9,3692	+9,7636 ,6701 ,5969 ,7444 ,7544	1,1761 ,1751 ,1746 ,1738 ,1724	+9,8215 ,8228 ,8235 ,8245 ,8262	5118 -	- 2,86 - 2,51 - 1,79 - 1,24		+ 1,30 + 5,63 - 1,95 - 4,72
2726 2727 2728 2729 2730	50 55 42,37 48 10 29,44 42 49 26,57 37 14 4,51 43 9 35,77	14,870 14,862 14,827 14,811 14,799	9,3944 9,3243 9,1461 8,7993 9,1614	+9,7606 ,7126 ,7017 ,6506 ,7036	-1,1723 ,1721 ,1710 ,1706 ,1703	+9,8263 ,8266 ,8279 ,8284 ,8288	5130 - 5134 -	0,59 2,35 2,20 2,64 0,57		- 0,29 + 4,03 - 0,67 - 2,18 + 1,94
2731 2732 2733 2734 2734 2735	30 4 0,97 40 26 19,15 51 16 39,41	14,768 14,768 14,760 14,724 14,693	9,4955 +8,6688 9,0374 9,4116 8,8325	+9,7941 ,5675 ,6793 ,7584 ,6490	-1,1693 ,1693 ,1691 ,1680 ,1671	+9,8300 ,8300 ,8302 ,8315 ,8326	5141 5142	- 0,65 - 2,19 - 7,50 - 2,16	+63,31	+ 2,83 - 5,67 - 1,02 + 6,82 - 0,10
2736 2737 2738 2738 2739 2740	57 3 49,00 56 16 53,95 35 18 36,17		9,5263 9,5289 9,5172 8,6434 9,3579	+9,7861 ,7868 ,7828 ,6230 ,7311	-1,1649 ,1647 ,1646 ,1627 ,1602	+9,8351 ,8353 ,8354 ,8375 ,8402	5184 5165 5166 5166 5170	- 1,90 - 0,17 - 2,50 - 2,13		- 1,97 + 4,93 - 0,28 - 4,63
2741 2742 2743 2744 2744	60 30 11,07 51 24 8,22 29 55 39,30	14,445 14,425 14,108	+8,7924 9,5988 9,4346 +8,4624 9,5999	+9,5253 ,7976 ,7602 ,5550 ,7984	-1,1602 ,1597 ,1591 ,1586 ,1584	8420	5173 5172 5174 5177 5175	- 1,54 - 3,14 - 1,82 - 2,16 - 0,66	in the second	- 2,52 - 1,42 + 1,14 + 0,47 - 2,56

No.	Names.	Mag.	No.	Right Ascen.	Annual		Logari	ithms of	
			Оьв.	Jan. 1, 1840.	Precesn.	a	b	c	
2746 2747 2748 2749 2750	Lupi Circini Lupi	7 6·7 7.8 7.8 9.10	2 2 3 2 1	n. m. s. 14 56 12,60 56 19,88 56 30,15 57 25,62 58 22,46	8 + 3,735 4,119 4,590 3,943 4,486	-8,7701 ,8583 ,9616 ,8145 ,9354	8,7567 ,8454 ,9497 ,8056 ,9283	+0,5723 ,6148 ,6618 ,5958 ,6519	+8,5357 ,7327 ,8925 ,6492 ,8566
2751 2752 2753 2754 2754 2755	Lupi	6.7 7 7.8 7.8 6	2 2 2 2	57 51,43 58 7,33 58 33,71 58 56,33 59 23,14	3,854 3,921 3,776 3,748 4,403	-8,7925 ,8072 ,7732 ,7660 ,0126	—8,7855 ,8011 ,7687 ,7680 ,9116	+0,5859 ,5934 ,5770 ,5738 ,6437	+8,6005 ,6349 ,5525 ,5335
2756 2757 2758 2759 2760	Circini Lupi	7.8 9. 8 8	3 2 3 4 1	15 0 4,53 0 3,45 0 42,75, 0 45,06 0 52,63	4,783 3,964 4,262 4,007 4,128	-8,9900 ,8096 ,8775 ,8194 ,8469	-8,9898 ,8108 ,8813 ,8237 ,8514	+0,6797 ,5970, ,6296 ,6028	+8,9324 ,6444 ,7711 ,6664 ,7190
2761 2762 2763 2764 2765	Circini Lupi	7 7.8 7.8 7.8 6.7	1 3 1 2 2	1 5,65 0 48,49 1 27,56 1 51,81 3 3,87	4,766 4,008 4,112 3,688 3,752	-8,9816 ,81.89 ,84.14 ,7460 ,7563		+0,6781 ,6029 ,6140 ,5668 ,5743	+8,9224 ,6659 ,7099 ,4827 ,5203
766 767 768 769 770	di Circini Lupi de Circini Libræ	6.7 7.8 — 6 6	3   3   3	3 45,69 3 52,55 4 4 4,94 4 25,76	4,755 3,959 4,756 4,762 3,530	-8,9706 ,7997 ,9699 ,97,10 ,7092	-8,9863 ,81,57 ,9866 ,9877 ,7269	+0,6771- ,5976 ,6772 ,6778 ,5478	+8,9095 ,6319 ,9087 ,9102 ,5448
771 772 773 774 776	Lupi	8 7.8 7.8 6.7 8	2 3 3 1 2	4 36,97 4 47,94 5 11,69 5 31,06 5 39,44	3,986 4,121 4,122 3,968 3,787	8,8038 ,8336 ,8328 ,7973 ,7570	8,8225 ,8631 ,8535 ,8193 ,7795	-F0,6005 ,6150 ,6151 ,6986 ,5783	+8,6421 ,7011 ,7002 ,6303 ,5321
776 777 778 779 780	Lupi Circini Lupi Circini	7 7.8 7 7.8	3 2 2 2 3	5 44,16 5 48,08 6 0,99 6 2,71 6 23,93	4,001 4,118 4,744 3,935 4,722	-8,8042 ,830) ,9609 ,7885 ,9854	8,8269 ,8581 ,9851 ,8125 ,9810	+0,6022 ,6147 ,6761 ,5949 ,6741	+8,6453 ,6962 ,8980 ,61 <b>22</b> ,8910
781 782 788 784 786		7 7.8 7.8 6.7	2 2 1 2	6 6 54,82 7 3,92 7 28,40 7 39,97	4,724 4,398 4,125 4,126 3,902	-8,9549 ,8877 ,8280 ,8269 ,7767	-8,9814 ,9163 ,8668 ,8662 ,8068	+0,6743 ,6433 ,6154 ,6155 ,5913	-F8,8904 ,7945 ,6944 ,6931 ,5891
786 787 788 789 790	Lupl Circini Circini	8 7 7 8 8	2 1 2 2 2	7 48,52 8 34,87 9 21,26 9 21,93 9 42,32	3,913 4,499 3,796 4,408 4,561	-8,7785 ,9034 ,7492 ,8421 ,9126	-8,8004, ,93,73 ,7869 ,9188 ,9507	+0,5925 ,6531 ,6793 ,6442 ,6591	+8,5940 ,8197 ,5237 ,7885 ,8340

NT.	Declination and	Annual		Logarit	hma of .		Differ	ence from th	e Brisbane	Catalogue.
No.	(South.) Jan. 1, 1840.	Precession	; a':	b'	<i>c'</i>	ď	No.	M. C.		Declin.
2746 .2747 2748 2749 2750	35 38 17,96 48 27 49,74 58 31 3,68 43 5 14 62 56 29 52,03		-8,7243 9,3699 9,5658 9,2068 9,5378	+9,6216 ,7302 ,7863 ,6886 ,7743	1,1580 ,1577 ,1573 ,1558 ,1549	+9,8427 ,8429 ,8435 ,8450 ,8459	5178 5179 5180 5189 5183	1,96 - 2,23 - 1,58 - 2,95 - 36,24	<b>5.</b>	- 6,47 + 2,39 + 4,91 + 4,60 + 55,39
2751 2752 2753 2754 2755	39 57 41,78 42 14 46,64 36 58 3,38 35 48 50,82 54 43 54,45	14,286 14,270 14,245 14,221 14,188	-9,0719 9,1790 8,8808 8,7781 9,5145	+9,6609 ,6802 ,6310 ,6185 ,7620	1,1549 ,1544 ,1537 ,1529 ,1519	+9,8459 ,8464 ,8472 ,8480 ,8490	5184 5186 5188 5191 5193	$\begin{array}{c} -1,81 \\ -2,71 \\ -1,88 \\ -2,12 \\ -2,42 \end{array}$		- 5,88 + 0,25 - 0,54 - 4,81 - 7,28
2756 2757/ 2758 2759 2760	61 7 52,29 43 6 30,62 51 29 28,25 44 39 53,22 48 7 42,53	14,175 14,151 14,109 14,101 14,097	-9,6128 ,2227 ,4564 ,2810 ,3784	+9,7921 ,6837 ,7412 ,6944 ,7193	-1,1515 ,1508 ,1495 ,1492 ,1491	+9,8494 ,8501 ,8514 ,8516 ,8517	5194 5201 5203 5206 5207	-31,90 - 1,14 - 2,30 + 2,19	$-\frac{\overline{2,79}}{-2,37}$	- 3,67 + 5,86 - 2,33 + 3,27 + 5,53
2761 2762 2763 2764 2765	60 44 0,56 44 39 56,15 44 36 21,57 33 1 39,32 35 29 2,07	14,080 14,085 14,059 14,038 13,963	-9,6117 9,2810 9,3692 8,3979 8,8062	-1-9,7874   ,6939   ,7146   ,5821   ,6070	-1,1486 ,1487 ,1480 ,1473 ,1460	+9,8522 ,8521 ,8529 ,8535 ,8557	5209 5211 5215 5218 5221	$\begin{array}{r} -2,56 \\ +17,49 \\ -0,58 \\ -3,02 \\ -1,62 \end{array}$		$\begin{array}{c} -1,82 \\ -0,32 \\ +2,42 \\ -3,12 \\ -5,43 \end{array}$
2766 2767 2768 2769 2770	60 18 9,96 42 46 53,04 60 16 60 21 24,13 25 35 19,31	13,913 13,909 13,897 13,897 13,880	9,6128 9,2330 9,6138 9,6149 +8,8976	+9,7804 ,6735 ,7798 ,7802 ,4760	-1,1434 ,1438 ,1429 ,1429 ,1424	+9,8572 ,8573 ,8577 ,8577 ,8581	5225 5230 5228 5229 5233	$ \begin{array}{r}                                     $	$-\frac{2,98}{3,16}$	$ \begin{array}{c c} - 4,10 \\ + 5,67 \\ + 1,22 \\ + 0,26 \end{array} $
2771 2772 2773 2774 2774 2775	43 32 43,20 47 28 18,18 47 26 37,40 42 53 1,97 36 32 52,25	13,863 13,850 13,829 13,808 13,799	-9,2648 9,3802 9,3802 9,2430 8,9191	+9,6783 ,7070 ,7063 ,6712 ,6130	-1,1418 ,1415 ,1408 ,1401 ,1399	+9,8586 ,8590 ,8596 ,8602 ,8604	5234 5235 5238 5242 5244		700 la	+ 4,43 -30,73 - 2,09 + 4,09 + 5,39
2776 2777 2778 2779 2780	47 15 56,40 59 54 5,68 41 40 14,01	13,795 13,791 13,770 13,774 13,749	-9,2787 ,3784 ,6138 ,2041 ,6095	+9,6789 ,7038 ,7742 ,6608 ,7719	-1,1397 ,1396 ,1389 ,1391 ,1383	+9,8606 ,8607 ,8613 ,8612 ,8619	5245 5248 5249 5250 5251	<b>2,63</b>		+ 1,42 + 0,84 - 3,59 + 0,66 - 2,50
2781 2782 2783 2784 2784	53 46 12,37 47 18 22,50 47 17 3,93	13,732 13,715 13,710 13,685 13,672	-9,6107 ,5211 ,3838 ,3856 ,1614	7006	-1,1377 ,1372 ,1370 ,1362 ,1358	+9,8623 ,8628 ,8629 ,8637 ,8640	5253 5254 5257 5261 5262	-1,49 $-1,64$ $-2,99$	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	$ \begin{array}{r}  + 0,33 \\  + 2,92 \\  - 0,28 \\  - 2,73 \end{array} $
2786 2787 2788 2789 2790	55 32 39,03 36 30 5,20 53 42 10,87	13,659 13,608 13,661 13,561 13,535	9,5264	,7482 ,6049 ,7367	,1338 ,1323 ,1323	,8658 ,8670 ,8670 ,8677	5264 5267 5273 5273 5274	$ \begin{array}{c cccc}  & -2,62 \\  & -1,09 \\  & -1,95 \end{array} $		- 2.05 - 4.00 - 1.93 + 0.98 + 1.53

No.	Names,	Mon	No.	Right Ascen.	Annual		Logarit	hms of	
110,	raines,	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	. в	· c	· d
2791 2792 2793 2794 2795	Lupi Circini Lupi	7.8 7.8 6.7 7	1 2 2 2 2	H. M. S. 15 9 56,76 10 27,50 10 41,35 11 3,21 11 6,11	s. + 4,132 4,381 4,699 4,160 3,905	8,8209 ,8728 ,9364 ,8231 ,7676	-8,8596 ,9138 ,9784 ,8663 ,8109	+0,6162 ,6416 ,6720 ,6191 ,5916	-1-8,6863 ,7753. ,8683 ,6924 ,5773
2796 2797 2798 2798 2800	Section of the sectio	7 7 7 7.8	4 2 1 2	11 29,44 11 34,69 11 12 16,91 13 3,01	4,582 4,301 4,583 3,681 3,616	8,9110 ,8529 ,9106 ,7184 ,7039	—8,9558 ,8976 ,9562 ,7655 ,7545	+0,6611 ,6336 ,6611 ,5660 ,5582	+8,8335 ,7438 ,8330 ,4382 ,3864
2801 2802 2803 2804 2804	Libræ Lupi	7 6.7 8 7.8 8	2 1 2 2 2	13 57,61 14 5,26 14 27,62 14 32,90 15 20,33	4,374 4,130 3,574 3,780 3,790	8,8601 ,8078 ,6929 ,7320 ,7318	-8,9144 ,8626 ,7486 ,7883 ,7912	+0,6409 ,6159 ,5531 ,5775 ,5786	+8,7596 ,8696 ,3462 ,4946 ,4974
2806 2806 2806 2806 2810	Lupi	8 7.8 7.8 7	2 2 2	15 15 39,55 15 44,01 15 52,74 16 4,92	5,266 3,894 4,076 4,224 3,803	-9,0209 8,7526 8,7911 8,8229 8,7324	9,0817 8,8131 8,8519 8,8840 8,7946	+0,7215 ,5904 ,6101 ,6257 ,5801	+8,9795 ,5646 ,6403 ,7000 ,5022
2811 2812 2813 2814 2814		8.9 8 8 7	3 2 2 2	16 17 50,08 17 56,94 18 2,71 18 3,56	3,793 4,062 4,288 3,728 3,837	-8,7297 ,7818 ,8293 ,7123 ,7338	-8,7928 ,8508 ,8991 ,7818 ,8036	+0,5790 ,6087 ,6322 ,5715 ,5840	+8,4952 ,6263 ,7147 ,4484 ,6141
2816 2816 2816 2816 2826	Libree	6 7 6.7 7	2 4 2	18 17,93 18 55,49 18 56,83 19 16,97	4,129 4,415 3,868 3,618 3,869	-8,7948 ,8525 ,7376 ,6884 ,7365	-8,8656 ,9259 ,8109 ,7628 ,8117	+0,6168 ,6449 ,5876 ,5586	+8,6531 ,7539 ,5277 ,3642 ,5267
282 282 282 282 282		7 6.7 8 8	2 1 2 2 2	19 41,75 19 44,62 20 37,38 20 49,14 21 15,02	3,970 4,181 3,736 4,298 3,744	-8,7569 ,8012 ,7066 ,8224 ,7063	-8,8328 ,8776 ,7861 ,9029 ,7884	+0,5988 ,6213 ,5724 ,6333 ,5733	+8,5772 ,6680 ,4431 ,7074 ,4457
282 282 282 282 282 283		7.8 7 7 7.8 8	3 1 3 2 2	21 15,60 21 40,45 22 49,71 23 52,38 24 25,81	4,081 3,876 3,935 3,904 3,546	8,7755 ,7315 ,7402 ,7308 ,6628	-8,8576 ,8152 ,8285 ,8230 ,7670	+0,6108 ,5884 ,5949 ,5915 ,5497	+8,6214 ,5217 ,5478 ,5280 ,2833
283 283 283 283 283	Normæ Lupi	6.7 7 7 7	2 2 2 3	25 16,27 25 54,28 26 5,50 26 32,30 26	4,071 4,508 3,963 3,963 3,968	-8,7613 ,8484 ,7363 ,7351 ,7359	-8,8588 ,9485 ,8372 ,8376 ,8387	+0,6097 ,6540 ,6980 ,5980 ,5986	

	Declination.	Annual		Logari	thms of		Diffe	rence from the Right Ass		
No.	(South.) Jan. 1. 1840.	Precession	a'	b' .	c'	d'	No.	fvor M.C.		Declin.
2791 2792 2793 2794 2795	47 10 25,24 63 0 59,48 58 44 11,41 47 43 19,15 40 9 57,59	13,527 13,488 13,471 13,449 13,449	9,39 <b>0</b> 9 9,5185 9,6 <b>10</b> 7 9,4116 0,1643	+9,6947 ,7306 ,7594 ,6961	-1,1312 ,1299 ,1294 ,1287 ,1287	+9,8680 ,8690 ,8695 ,8700 ,8700	5279 5282 5283 5288 5287	- 2,26 - 1,09 - 2,16 - 1,44	- 2,20 - 2,49	- 1,79 + 3,46 + 4,65 + 7,09 - 7,47
2796 2797 2798 2799 2800	56 45 2,49 51 9 17,26 56 45 31 36 27,68 28 45 41,39	13,423 13,414 13,410 13,383 13,323	-9,5832 -9,4871 -9,5843 -8,3222 +8,3010	+9,7484 ,7172 ,7479 ,5444 ,5053	-1,1278 ,1276 ,1274 ,1266 ,1246	+9,8707 ,8710 ,8711 ,8717 ,8733	6289 6290 6292 5295 6300	- 2,94 - 1,42 - 1,47 1,15		- 1,25 + 1,43 + 1,06 + 2,47
2801 2802 2803 2804 2805	52 29 4,78 46 38 35,69 26 43 40,91 35 20 86,44 35 37 38,60	13,262 13,258 13,237 13,227 13,174	—9,5198 —9,3944 +8,6990 —8,9085 —8,9345	+9,7202 ,6829 ,4731 ,5821 ,5833	-1,1226 ,1223 ,1217 ,1215 ,1197	+9,8749 ,8751 ,8756 ,8758 ,8771	5305 5307 5309 5310 5316	- 3,13 - 2,70 - 3,22 - 2,28 - 2,02		- 0,37 + 1,45 - 3,40 - 0,99 - 1,47
2806 2807 2808 2809 2810	65 21 39 19 7,23 44 56 39,49 48 52 59,60 36 1 39,89	13,148 13,153 13,148 13,142 13,127	-9,7033 -9,1523 -9,3541 -9,4633 -8,9731	+9,7755 ,6101 ,6662 ,0939 ,5859	-1,1189 ,1190 ,1189 ,1187 ,1181	+9,8778 ,8777 ,8778 ,8779 ,8783	5314 5320 5321 5322 5323	- 0,96 1,95 2,95 2,28		- 1,09 - 4,47 +10,60 - 1,56
2811 2812 2813 2814 2815	50 10 26,54 32 58 45,17	13,108 13,008 12,993 12,998 12,993	8,9445 9,3463 9,4871 8,6990 9,0531	+9,5812 ,6567 ,6972 ,5481 ,5921	-1,1175 ,1142 ,1137 ,1139 ,1137	+9,8788 ,8813 ,8816 ,8816 ,8816	5327 5337 5340 5342 5343	- 1,83 + 1,06 - 3,03 1,86		- 0,80 - 2,77 + 0,91 - 2,19
2816 2817 2818 2819 2820	52 48 51,67 38 4 14,97 28 18 12,08		-9,3979 -9,5403 -9,1106 +8,2787 -9,1139	9,6695 ,7111 ,5999 ,4852 ,5988	-1,1131 ,1116 ,1116 ,1110 ,1106	+9,8820 ,8831 ,8835 ,8835 ,8838	5344 5345 5346 5349 5350	- 1,60	manuscript of the second of th	+ 5,03 - 3,19 + 0,10 - 2,17
2821 2822 2823 2824 2824	2 47 21 47,73 3 33 1 22,16 4 50 6 22,07	12,878 12,823 12,807	9,2553 9,4314 8,7404 9,4941 8,7781	+9,6285 ,6747 ,5426 ,6905 ,5440	,1098 ,1080 ,1074	+9,8841 ,8844 ,8856 ,8860 ,8867	5351 5352 5361 5362 5366	$\begin{bmatrix} -1,24 \\ -2,07 \\ -2,80 \end{bmatrix}$		+ 0,56 + 0,67 - 1,90 -10,20 + 3,45
282 282 282 282 282 283	7, 38 4 2,57 8 39 56 27,86 9 38 48 6,01	12,762 12,671 12,603	$\begin{bmatrix} -9,1271 \\ -9,2148 \\ -9,1732 \end{bmatrix}$	,608 <i>5</i> ,5957	,1066 ,1028 ,1005	,8892 ,8907	5363 5369 5376 5378 5389	$\begin{array}{c c} - 1,22 \\ - 2,32 \\ - 1,96 \end{array}$	المحمودين المحم	- 4,57 - 3,02 - 5,65 + 4,28 +4,57,30
283 283 283 283 283	2 53 59 1,4 3 40 31, 22,2 4 40 28 57,4	$5 \mid 12,462 \\ 3 \mid 12,448$	9,5787 -9,2528 -9,2553	,7016 ,6060 ,6048	,0956 ,0951 ,0942	,8938 ,8941 ,8947	5389 5399	$\begin{array}{c c} -2,16 \\ +1,51 \\ 2,45 \end{array}$	#61.241.16 #61.241.16	5,00

			No.	Right Ascen.	Annual		Logarith	ims of	1
No.	Names.	Mag.	Obs.	Jan. 1, 1840.	Procesn.	a	<i>b</i>	. c	d
2836 2837 2838 2839 2840	Normæ	6 7 7 7.8 7	2 1 1 2	H. M/ 8, 15 26 58,43 27 16,70 27 38,96 29 28,88 29 39,03	+ 4,405 4,565 4,653 4,468 4,213	-8,8242 ,8547 ,8702 ,8282 ,7766	—8,9286 ,9604 ,9774 ,9425 ,8914	,6594 ,6594 ,6677 ,6501 ,6246	+8,7199 ,7676 ,7908 ,7299 ,6424
2841 2842 2843 2843 2844 2845	Libræ Normæ Circini	7.8 7 7 6.7 7.8	3 2 2 2 2	29 55,68 30 21,15 30 55,78 31 5,13 31 45,59	3,611 3,699 4,280 4,292 4,978	8,6585 ,6724 ,7860 ,7878 ,9149	-8,7743 8,7898 8,9067 8,9083 9,0381	+0,5676 ,5681 ,6314 ,6327 ,6970	+8,3175 ,3805 ,6619 ,6655 ,8559
2846 2847 2848 2849 2850	Scorpii Normw Scorpii Lupi Normw	7,8 7.8 8	2 2	31 45,44 31 50,66 31 57,72 32 12,10	3,655 4,404 3,652 4,158 4,407	-8,6605 ,8078 ,6601 ,7572 ,8069	-8,7837 ,9312 ,7832 ,8817 ,9319	+0,5629 ,6438 ,5625 ,6189 ,6441	+8,3434 ,7006 ,3413 ,6109 ,6999
2851 2852 2853 2853 2854 2855	Lupi Normæ	6.7 7 7	4 2 2 1	33 33 36,59 34 6,20 34 52,25 35 10,87	4,011 4,012 3,717 4,481 4,277	-8,7233 ,7228 ,6647 ,8027 ,7712	-8,8530 ,8533 ,7970 ,9379 ,9077	+0,6032 ,6034 ,5702 ,0465 ,6311	+8,5430 ,5425 ,3778 ,6071
2856 2857 2858 2859 2860	Normæ Lupi Normæ Lupi Normæ	8 7 7.8 8 8	ପ ପ ପ ପ ପ	36 32,69 36 48,94 36 51,43 37 16,66 37 16,85	4,555 3,968 4,454 4,112 4,445	-8,8208 ,7042 ,8001 ,7310 ,7970	8,9030 ,8472 ,9437 ,8761 ,9421	+0,6685 ,0903 ,0487 ,6140 ,6480	+8,7283 ,5095 ,6964 ,5717 ,6919
2861 2862 2863 2864 2865	Normæ	7 7 7 7 7.8	2 2 2 1 2	38 35,47 39 5,47 39 50,84 40 25,85 42 3,71	3,655 4,157 4,861 4,563 4,965	-8,6408 ,7340 ,8649 ,8089 ,8727	-8,7910 8,8864 9,0205 8,9666 9,0377	+0,5629 ,6188 ,6867 ,6694 ,6960	4 8,3167 ,5829 ,796 1 ,7155 ,8089
2866 2867 2868 2869 2870	Scorpii Normæ	6.7 7 8 7.8 7	2 2 2 1 2	42 10,50 42 21,25 42 38,88 42 44,50 43 4,74	3,802 3,690 4,420 4,535 4,379	8,6558 ,6353 ,7734 ,7948 ,7639	8,8200 ,8006 ,9401 ,9621 ,9324	4-0,5800 ,5670 ,6454 ,6566 ,6414	+8,3994 ,3265 ,6626 ,6972 ,6475
287] 2872 2873 2874 2876	Normœ Scorpii Normœ Lupl	7.8 8 7.8 7	3 1 1 1 2	44 19,58 44 20,00 44 47 8,18 47 18,68	4,970 4,099 8,585 4,749 4,135	-8,8671 ,7052 ,6116 ,8180 ,7013	-9,0409 8,8786 8,7861 9,0032 8,8874	+0,6964 ,6127 ,5545 ,6766 ,6165	- -8,8036 ,538 ,236 ,738 ,738
2876 2877 2878 2879 2880	Luji Normai Lupi	7.8 5.6 7.8 6.7	2 2 2 2 1	47 33,76 48 37,76 48 40,84 49 11,61 49 42,13	4,055 4,682 3,787	,6815 ,7893 ,6300	8,9736 8,8728 8,9809 8,8236 9,0067	+0,6614 ,6080 ,6648 ,5783 ,6785	+8,692 ,601 ,697 ,361

		Declination	Annual		Logari	thms of		Dlffer		he Brisbane scension	
	No.	(South.) Jan. 1. 1840.	Précession	a'	6'	c'	d'	No.	M.C.	rom   T.	Declin.
,	2836 2837 2838 2839 2840	51 50 15,57 54 63 42,70 56 22 55,51 52 51 53,33 47 12 30,26	12,388 12,367 12,338 12,215 12,205	-9,5441 -9,5966 -9,6191 -9,5682 -9,4579	+9,6867 ,7032 ,7099 ,6866 ,6504	-1,0930 ,0922 ,0913 ,0869 ,0865	+9,8954 ,8959 ,8965 ,8992 ,8994	5396 5397 5401 5408 5409	8. - 2,96 - 3,15 - 2,04 - 1,72 - 2,12	3,63	$ \begin{array}{c} + 2,57 \\ - 1,96 \\ + 3,66 \\ + 2,79 \\ + 0,25 \end{array} $
	2841 2842 2843 2844 2844	27 6 57,57 30 41 14,41 48 41 38,87 48 57 57,13 60 46 37,92	12,187 12,158 12,117 12,103 12,057	+8,3802 -8,5185 -9,4955 -9,5011 -9,6857	+9,4430 ,4910 ,6574 ,6586 ,7203	1,0859 ,0849 ,0834 ,0829 ,0812	+9,8998 ,9003 ,9012 ,9015 ,9024	54   4 54   7 54   22 54   24 54   26	- 0,34 - 2,21 - 2,24 - 1,65 - 3,95		- 1,22 - 5,87 + 8,33 + 8,19 - 1,76
	2846 2847 2848 2849 2850	28 46 37,85 51 21 28 59 46,32 45 33 32,68 51 23 13,61	12,057 12,052 12,057 12,033 12,025	-7,6990 -9,5478 -7,3010 -9,4265 -9,5490	+9,4621 ,6720 ,4605 ,6322 ,6711	-1,0812 ,0810 ,0812 ,0804 ,0800	+9,9024 ,9025 ,9024 ,9029 ,9031	δ431 δ427 δ432 5433 δ484	+ 0,75 - 2.52 + 7,40 - 1,20	-	+ 1,85 - + 1,26 - 3,20 + 1,46
	2851 2852 2853 2854 2855	41 18 41 18 11,79 31 5 8,20 51 38 15,99 48 13 37,87	11,940 11,925 11,893 11,842 11,818	-9,3096 -9,3017 -8,6434 -9,561 I -9,4955	+9,5948 ,5942 ,4865 ,6659 ,6434	-1,0770 ,0765 ,0763 ,0734 ,0725	+9,9048 ,9051 ,9057 ,9068 ,9072	5447 6449 5452 5454 5456	$ \begin{array}{r}  - 1,66 \\  - 1,17 \\  - 4,16 \\  - 2,21 \end{array} $		- 2,65 - 2,39 + 5,72 + 4,53
	2856 2857 2854 2859 2866	53 53 24,97 39 41 17,61 51 56 11,04 43 50 54,96 51 42 53,78	11,718 11,704 11,696 11,667 11,667	—9,6010 —9,2648 —9,5705 —9,3979 —9,5670	+9,6744 ,5718 ,6623 ,6057 ,6599	-1,0680 ,0680 ,0669 ,0669	+9,9091 ,9094 ,9096 ,9101 ,9101	5465 5475 5474 5480 5479	- 1,07 - 2,47 - 2,08 - 2,16 - 3,20		+11,74 - 6,95 - 5,28 + 5,31 + 5,86
,	2861 2862 2863 2864 2865	28 17 15,18 44 54 17,58 58 33 53,51 53 45 2,16 33 37 43,30	11,677 11,638 11,481 11,442 11,328	7,6990 9,4314 9,6749 9,6085 8,9823	+9,4375 ,6091 ,6892 ,6633 ,4958	-1,0636 ,0621 ,0600 ,0685 ,0641	+9,9118 ,9126 ,9136 ,9143 ,9164	6488 6489 6492 6496 6509	- 1,79 - 0,49 - 2,21 - 3,78 - 2,74		- 2,48 - 3,13 + 2,45 + 4,61 + 0,24
	2866 2867 2868 2869 2870	29 23 41,62 50 45 14,61 53 0 1,01	11,313 11,308 11,283 11,274 11,250	—9,6937 —8,4314 —9,5635 —9,5999 —9,5478	+9,6878 ,4427 ,0396 ,6526 ,6326	1,0 <b>63</b> 6 ,0 <b>5</b> :34 ,0525 ,0621 ,0512	+9,9167 ,9168 ,9172 ,9174 ,9178	5507 5511 5512 5513 5515	- 2,97 - 2,53 - 2,40 - 2,56 - 1,33	- 2,75 	- 3,89 - 4,43 + 0,46 + 0,98 - 3,13
	2871 2872 2873 2874 2875	24 55 56 20 34,42	11,158 11,163 11,144 10,954 10,940	-9,6981 -9,3927 +8,6335 -9,6599 -9,4216	+9,6820 ,5791 ,3702 ,6580 ,5768	-1,0476 ,0478 ,0470 ,0396 ,0390	+9,9194 ,9193 ,9197 ,9229 ,9232	5520 5522 5525 5537 5541	$\begin{array}{r} -2,75 \\ -2,04 \\ \hline -3,28 \\ +0,54 \end{array}$	B: 1	0,00 + 3,48 - 0,80 + 0,21**
	2876 2877 2878 2879 2880	41 16 41,73 54 6 47,35 32 32 46,43	10,925 10,846 10,843 10,807 /10,768	- 9,6191 9,3598 9,6314 8,9395 9,6646	+9,6420 ,5529 ,6418 ,4628 ,6508	-1,0384 ,0363 ,0351 ,0337 ,0327	+9,9234 ,9247 ,9248 ,9254 ,9260	5642 5548 5547 5550 5653	- 1,80 - 1,95 - 1,91 - 3,67 - 3,21		- 1,87 + 1,62 + 7,65 - 0,18 + 1,01

No.	Names.	Mag.	No.	Right Ascen.	Annual		Logarit	hms of	
	Litaties,	urug.	Obs.	Jan. 1, 1840.	Precesn.	а	6	c	d
288 288 288 288 288	Normæ Tri. Aust. Normæ	7.8 6.7 8 7 8	2 1 1 2 2	11, M. s. 15 49 51,96 50 8,03 50 11,70 51 11,15 52 0,42	* +3,738 4,446 5,025 4,096 4,588	-8,6194 ,7509 ,8542 ,6804 ,7703		+0,5726 ,6480 ,7012 ,6124 ,6616	+ 8,3276 ,6395 ,7920 ,5080 ,6742
288 288 288 288 289	7 Lupi 8 Normee 9 Lupi	7.8 7.8 8 7.8 7	2222	52 29,32 52 53,27 53 6,04 54 2,79 54 37,72	4,746 3,915 4,404 3,991 4,747	-8,7968 ,6406 ,7320 ,6505 ,7887	9,0047 8,8496 8,9422 8,8646 9,0057	+0,6763 ,5927 ,6438 ,6011 ,6764	+8,7149 ,4170 ,6136 ,4493 ,7061
289 289 289 289 289	Lupi Norme	8 7 7.8 7 5.6	2 2 2 2 2 2	54 37,82 55 42,59 55 45,01 55 54,13 56 6,41	3,688 4,030 4,340 4,569 3,912	-8,5954 ,6516 ,7100 ,7522 ,6285	8,8118 ,8728 ,9315 ,9742 ,8515	+0,5688 ,6053 ,6375 ,6598 ,5924	+8,2741 ,4598 ,5811 ,6525 ,4016
289 289 289 289 290	7 ————————————————————————————————————	5.6 7.8 7 7 8	1 1 2 1	56 12,31 56 18,08 56 22,82 56 46,33 56 54,37	4,868 4,260 4,746 3,912 4,774	-8,8038 ,6929 ,7818 ,6263 ,7843	9,0274 8,9167 9,0062 8,8521 9,0113	+0,6873 ,6294 ,6763 ,6924 ,6789	+8,7299 ,5505 ,6985 ,3989 ,7031
290 290 290 290 290	2	7.8 7.8 7 7	2 2 2 3	57 69,92 59 3,26 69 17,06 59 21,61 59 22,38	4,754 3,780 4,452 3,797 4,028	-8,7768 ,5951 ,7173 ,5969 ,6379	-9,0081 8,8507 8,9541 8,8337 8,8750	+0,6771 ,5775 ,6486 ,5794 ,6051	+ 8,6936 8,3152 8,6024 8,3239 9,4434
290 290 290 290 290	7 8	6.7 6.7  8 7.8	2 1 -1 2	59 27,03 59 38,09 59 16 0 24,93 0 31,50	4,655 3,823 4,895 4,065 4,661	8,7536 ,6002 ,7934 ,6407 ,7503	-8,9913. 8,8384 9,0331 8,8825 8,9926	+0,6679 ,5824 ,6897 ,6091 ,6685	+8,6612 ,3378 ,7200 ,4550 ,6580
29 29 29 29 29	3	8 6 7.8 7	3 1 2 2	0 0 53,67 0 55,12 1 18,87 2 20,95	4,890 4,900 4,678 4,428 4,386	-8,7896 ,7901 ,7520 ,7047 ,6930	-9,0325 9,0342 8,9958 8,9506 8,9433	+0,6893 ,6902 ,6701 ,6462 ,6421	+8,7157 ,7167 ,6611 ,5856 ,5677
29 -9 -9 29 29	19	6.7 6 7.8 6.7	4 2 - 2 2	2 39,21 3 40,03 4 10,68 4 14,10	4,898 4,320 4,908 4,023 4,645	8,7827 ,6757 ,7783 ,6188 ,7322	-9,0344 8,9316 9,0366 8,8772 8,9911	+0,6900 ,6355 ,6909 ,6045	+8,7087 ,5395 ,7045 ,4199 ,6369
29 29 29 29 29	22 23 24 ————————————————————————————————————	6.7	2 2 4 2	4 17,85 4 31,87 4 40,95 5 0,93	4,140 4,137 4,639 4,908 4,151	-8,6398 ,6392 ,7298 ,7760 ,6389	8,8987 8,8981 8,9903 9,0367 8,9011	+0,6170 ,6167 ,6664 ,6909 ,6181	+8,4695 ,4682 ,6339 ,7021 ,4705

No.	Declination.	Annual	<del></del>	Logari	thms of		Diffe		be Brisbane scension	Catalogue.
140,	(South.) Jan. 1. 1840.	Precession	a'	<i>b'</i>	c'	d'	No.	fro M.C.		Declin.
2881 2882 2883 2884 2885	30 42 16,99 50 39 43,27 60 2 35,80 42 14 9,20 53 15 24,83	-10,758 10,734 10,728 10,659 10,595	-8,7634 -9,5775 -0,7118 -9,3944 -9,6232	+9,4381 ,6174 ,6664 ,5534 ,6271	-1,0317 ,0307 ,0305 ,0277 ,0251	+9,9262 ,9266 ,9267 ,9278 ,9288	5556 5558 5657 5561 5566	-2,01 $-2,57$ $-1,77$	3,52 — 1,95	- 4,09 - 0,08 - 3,29 - 1,96 + 1,69
2886 2887 2888 2889 2890	55 53 26,88 36 40 52,26 49 33 55,12 38 59 7,31 55 44 55,85	10,556 10,536 10,516 10,446 10,397	-9,6637 -9,2041 9,5647 9,3010 9,6646	+9,6396 ,4972 ,6015 ,5159 ,6324	1,0235 ,0227 ,0218 ,0190 ,0169	+9,9294 ,9297 ,9301 ,9311 ,9319	5568 5573 5574 5576 5577	- 3,23 - 3,18 - 2,04	#	- 1,78 -10,09 + 0,57 + 0,26 - 3,01
2891 2892 2893 2894 2896	28 28 58,50 40 0 32,11 47 58 60,68 52 38 21,86 36 21 37,51	10,407 10,322 10,317 10,307 10,292		+9,3940 ,5201 ,5827 ,6116 ,4836	1,0173 ,0138 ,0135 ,0131 ,0125	+9,9318 ,9331 ,9331 ,9333 ,9335	5579 5587 5585 5588 5691		——————————————————————————————————————	+ 4,15 - 6,99 + 6,74 + 5,10 - 0,85
2896 2897 2898 2899 2900	57 29 40,56 46 5 3,53 55 37 23,36 36 18 52,97 50 1 33,51	10,282 10,278 10,268 10,242 10,222	9,6911 9,6024 9,6665 9,2014 9,6730	+9,6362 ,5676 ,6262 ,4811 ,6263	-1,0121 ,0119 ,0114 ,0104 ,0095	+9,9337 ,9337 ,9339 ,9343 ,9346	5590 5595 5594 5598 5597	<b>—</b> 1,76		- 1,69 - 1,26 - 6,61 - 0,72 + 3,09
2901 2902 2903 2904 2905	55 38 28,09 31 39 17,04 50 6 59,66 32 12 58,97 39 41 54,30	10,147 10,071 10,060 10,050 10,046	—9,6693 — 8,9294 —9,6866 —8,9731 —9,3404	+9,6212 ,4213 ,5854 ,4273 ,6055	-1,0063 ,0031 ,0022 ,0028 ,0020	+9,9357 ,9368 ,9371 ,9371 ,9372	5602 5608 5609 5613 5612	- 2,58 - 1,34 - 2,04 - 2,28 - 3,14	- <del>3,0</del> 6	- 1,94 - 6,29 - 1,71 + 0,90 - 1,63
2906 2907 2908 2909 2910	40 41 20,56	10,037 10,026 10,000 9,965 9,955	-9,6484 -9,0414 -9,0990 -9,3747 -9,6503	+9,6072 ,4268 ,6248 ,6109 ,6038	-1,0016 1,0011 1,0000 0,9986 0,9980	+9,9373 ,9376 ,9378 ,9383 ,9385	5610 5614 5615 5621 5619	2,38		$ \begin{array}{c c} + 5,30 \\ - 1,84 \\ - 3,75 \\ - 2,69 \end{array} $
2911 2912 2913 2914 2915	54 12 28,41 49 27 47,06	9,924 9,929 9,894	—9,6981 —9,7007 —9,6544 —9,5786 —9,5635	+9,6218 ,6215 ,6041 ,5744 ,6648	0,9976 ,9967 ,9969 ,9964 ,9920	+9,9386 ,9389 ,9388 ,9393 ,9404	5622 6626 5627 6630 5633	-2,83 $-3,64$		- 4,29 + 1,96 + 0,06 + 4,15
2916 2917 2918 2918 2918	46 57 24,15 3 57 29 3 39 12 48,04	9,721 9,680 9,680	-9,7007 -9,5353 -9,7041 -9,3385 -9,6474	+9,6150 ,5497 ,6102 ,4850 ,5882	-0,9909 ,9877 ,9859 ,9859 ,9864	+9,9408 ,9417 ,9423 ,9423 ,9424	5634 5637 5639 5645 5643		2,42	- 1,88 - 3,86 - 0,18 - 6,004
2921 2921 2921 2924 2924	2   42 24 3   53 16 55,54 4   67 29 51,11	9,670 9,645 9,640	-9,4346 -9,4330 -9,6474 -9,7041 -9,4409	,5125 ,5864 ,6082	0,9854 ,9864 ,9843 ,9840 ,9829	+9,9424 ,9424 ,9428 ,9429 ,9432	5646 5647 5648 5649 5656	- 0,39 - 3,61	2,76	+ 4,97 - 0,84 - 2,68 + 5,40

1		DAT	No.	Right Ascen.	Annual	<del></del>	Logarit	lims of	
No.	Names.	Mag.	)bs.	Jan. 1, 1840.	Precesn.	a	<i>b</i>	c }	<u>d</u>
2926 2927 2928 2929 2930		7 7.8 7.8 	2 2 2 1	H. M. s. 16 5 21,45 5 89,13 6 41,20 6 8 16,71	8 +4,634 4,912 4,694 4,423 4,726	-8,7257 ,7725 ,7311 ,6823 ,7298	8,9897 9,0378 9,0008 8,9520 9,0068	+0,6660 ,6913 ,6716 ,6457 ,6746	+8,6290 ,6987 ,6397 ,5601 ,6400
2931 2932 2933 2934 2936		5.6 6.7 7 6.7 6	2 2 1 1 2	8 22,78 8 52,56 9 5,77 9 42,71 10 32,20	3,702 4,687 4,769 4,376 4,444		8,8254 8,9825 9,0145 8,9448 8,9575	+0,5684 ,6615 ,6784 ,6411 ,6478	+8,2228 ,5997 ,6477 ,5311 ,5490
2936 2937 2938 2938 2946		7.8 6 8.9 9 7.8	3 2 1 2 2	10 42,90 11 14,02 11 29,40 11 40,40 12 30,28	4,123 4,198 4,758 4,752 3,969	8,6110 ,6224 ,7212 ,7117 ,6754		+0,6152 ,6230 ,6774 ,6750 ,5987	- - 8,4332 ,4604 ,6338 ,6215 ,3553
294 294 294 294 294	3	7 6.7 6.7 6.7 7	2 2 1 1	13 28,21 13 48,68 13 52,45 14 47,97 15 4,13	4,263 4,904 3,976 5,004 4,385	-8,6246 ,7454 ,6717 ,7476 ,6399	8,9259 9,0487 8,87 16 9,0555 8,9488	+0,6297 ,6958 ,5994 ,6993 ,6420	-+ 8,4739 ,6727 ,3532 ,6770 ,5088
294 294 294 294 296	Normæ	7 6 7 7 7.8	2 2 2 2 1	15 24,56 15 28,45 16 26,02 16 26,77 17 26,56	3,810 4,864 4,309 4,949 4,251	-8,5373 ,6344 ,6203 ,7312 ,6055	—8,8476 8,9462 8,9357 9,0469 8,9257	+ 0,5809 ,0399 ,6344 ,6945 ,6285	+8,2680 ,4999 ,4765 ,6568 ,4609
295 295 295 295 295	2	6.7 6.7 6.7 7	1 2 4 2 2	17 35,28 17 52,23 18 7,46 18 39,30 21 3,44	3,971 4,616 4,314 4,110 4,672	8,5561 ,6686 ,6135 ,6746 ,6633	-8,8700 8,9910 8,9373 8,9010 9,0016	+0,5989 ,6643 ,6349 ,6138 ,6696	+8,3329 ,5656 ,4697 ,3895 ,5649
295 295 295 295 296	7	7.8 7.8 — 7 6.7	2 1 - 1	22 20,30 22 42,79 25 23 39,26 23 49,42	4,490 4,704 4,475 4,285 4,671	8,6257 ,6609 ;,6180 ;,5834 ,6330	8,9704 9,0076 8,9680 8,9345 8,9851	+0,6522 ,6725 ,6508 ,6319 ,6600	+8,5063 ,5661 ,4962 ,4322 ,5230
296 296 296 296 296	Arma Normao	8.9 7.8 5.6 7.8 7.8	1 2 1 2 2 2	24 37,70 25 39 12 25 51,32 26 7,06 27 51,64	4,204 5,023 3,924 3,945 4,750	-8,5643 ,6994 ,6103 ,6126 ,6438	8,9205 9,0611 8,8727 8,8764 9,0170	+0,6237 ,7010 ,5937 ,5960 ,6767	+8,3971 ,6274 ,2682 ,2775 ,5507
296 296 296 296 297	7	7 6.7 7.8 8 8	2 2 2 2 3	28 8,21 28 23,96 28 24,10 28 57,89 28 47,21	4,410 3,993 4,598 4,595 4,459	8,5837 ,5096 ,6152 ,6117 ,5875	-8,9583 ,8856 ,9912 ,9909 ,9674	+0,6444 ,6013 ,6626 ,6623 ,6492	+8,4511 ,2880 ,5067 ,5027 ,4616

	Declination.	Annual	<del></del>	. Logari	thms of		Differ	ence from th Right A	e Brisbane	Catalogue.
No.	(South.) Jan. 1. 1840.	Precession	· a',	b'	c'	<u>d'</u>	No.	fro M.C.		Declin
2926 2027 2928 2920 2030	53 8 51,60 57 29 44,18 54 6 26,97 49 0 54 31 4,53		9,6464 ,7059 ,6628 ,5798	+9,5829 ,6048 ,5837 ,5530 ,5803	-0,9815 ,9806 ,9771 ,9771	+9,9436 ,9439 ,9449 ,9449 ,9465	5659 5662 5664 5665 5679	s. 1,36 2,96 6,03 2,45	3,40	$ \begin{array}{c c} - 0,93 \\ + 0,24 \\ + 0,55 \\ \hline - 2,79 \end{array} $
2031 2932 2933 2934 2935	28 12 32,01 52 4 30,05 55 0 30,80 47 47 40,20 49 10 53,61	9,357 9,316 9,295 9,264 9,187	-8,5563 9,6345 ,6803 ,5635 ,5890	4-9,3439 ,5643 ,5806 ,5342 ,5403	0,9711 ,9692 ,9683 ,9663 ,9632	+9,9466 ,9471 ,9474 ,9479 ,9488	5681 5682 5684 5687 5602	$\begin{array}{r} -0,49 \\ -1,63 \\ -2,40 \\ -1,72 \\ -2,16 \end{array}$	- 2,47 - 2,93	$ \begin{array}{c c} -0.07 \\ +0.17 \\ -6.12 \\ +4.02 \\ +3.96 \end{array} $
2936 2937 2938 2939 2940	41 36 44,33 43 31 22,06 54 50 0,68 54 20 31,28 37 2 17,63	9,176 9,135 9,109 9,021 9,025	-9,4249 ,4742 ,6794 ,6740 ,2833	+9,4830 ,4969 ,5701 ,5632 ,4335	0,0627 ,9607 ,9595 ,9552 ,9555	+9,9489 ,9494 ,9498 ,9508 ,9508	5694 5699 5700 5704 5705	$\begin{array}{r} -2,88 \\ -0,86 \\ -2,25 \\ +57,78 \\ +6,01 \end{array}$		+ 2,70 + 4,77 + 5,14 - 1,35 - 4,48
2941 2942 2943 2944 2944	44 58 14,44 57 44 35,94 37 11 8,50 58 13 31,84 47 40 9,79	8,958 8,927 8,932 8,848 8,832	-0,5119 ,7202 ,2900 ,7283 ,5705	+9,4996 ,6760 ,4306 ,5745 ,5131	-0,9522 ,9507 ,9509 ,9469 ,9461	+9,9516 ,9520 ,9619 ,9529 ,9531	5713 5715 5718 5720 5722	- 2,35 - 1,51 - 1,76 - 2,31 - 2,82	- 1,73 - 2,83 - 2,96	- 5,63 + 2,67 - 1,67 + 3,66 + 4,59
2946 2947 2948 2940 2960	47 10 55,56 45 52 49,17 57 23 25,22	8,812 8,801 8,728 8,722 8,619	-9,0128 ,5611 ,5366 ,7193 ,5079	4-9,3639 ,5082 ,4952 ,5643 ,4804	-0,9450 ,9446 ,9409 ,9406 ,9370	+9,9633 ,9536 ,9643 ,9644 ,9662	5724 5723 5730 5728 5734	- 0,91 - 2,24 - 2,07 - 2,38 - 3,01	2,47	- 0,22 - 0,88 + 4,17 - 3,30 + 0,81
2951 2952 2953 2954 2954 2956	52 4 42,65 45 52 50,01 40 44 54,56	8,638 8,612 8,591 8,549 8,359	-9,2856 ,6484 ,5403 ,4183 ,6646	+19,4123 ,5302 ,4883 ,4449 ,5218	-0,9364 ,9351 ,9340 ,9319 ,9221	+9,9554 ,9657 ,9659 ,9564 ,9585	5736 5737 5738 5739 5746	$\begin{bmatrix} -1,45 \\ -0,25 \\ -1,47 \end{bmatrix}$		+ 0,34 + 0,24 + 2,32 - 0,40 + 0,71
2956 2957 2958 2959 2960	53 18 5,93 3 49 44 53 57,30	8,268 8,226 8,173 8,167 8,141	-0,6128 ,6739 ,6086 ,5289 ,6385	,4585	-0,9169 ,9152 ,9124 ,9116 ,9107	+9,9596 ,9600 ,9605 ,9607 ,9608	5750 5751 5753 5754 5755	3,53 - 2,43 - 2,00	- 3,51	$\begin{bmatrix} -2,42 \\ -0,94 \end{bmatrix}$
2961 2962 2963 2964 2965	2 57 54 42,54 3 34 55 11,03 4 35 34 52,73	8,077 7,991 7,981 7,960 7,815	0,4843 ,7372 ,2279 ,2577 ,6875	,5287 ,3580 ,3638	,9020	,9625 ,9627 ,9642	5758 5763 5767 5769 5778	$ \begin{array}{c c} - 1,62 \\ - 3,31 \\ - 1,28 \\ - 4,79 \end{array} $	— 1,44 ——	+ 5,36 - 1,44 - 6,47 - 4,38 + 5,00
2966 2966 2966 2966 2970	7 36 53 15,02 8 51 9 32,91 9 51 4 28,65	7,772 7,779 7,723	9,5866 ,3139 ,6493 ,6484 ,6053	,3670 ,4801 ,4769	,8905 ,8905 ,8878	,9646 ,9646 ,9651	5788 5788 5788	$ \begin{array}{c cccc} 3 & - & 1,13 \\ 2 & - & 3,07 \\ 5 & - & 1,92 \\ \end{array} $	3,55	- 2,21

T <sub>N</sub>	NT.	No.	Right Ascen.	Annual		Logarit	hms of	-
No.	Names.	Mag. Obs		Precesn.	a	ь	c	d
2971 2972 2973 2974 2975	Arae	7 3 6 3 7 1 7 2 7.8 2	16 29 16,08 29 23,44 29 35,41 29 36,60 30 16,34	4,411 4,460 4,505 4,759 4,306	—8,5783 ,5863 ,5932 ,6365 ,5540	8,9590 8,9676 8,9756 9,0189 8,9409	+0,6445 ,6493 ,6537 ,6775 ,6341	+8,4455 ,4604 ,4732 ,5437 ,4047
2976 2977 2978 2979 2980	Y Arm Sorpii	7 2 7 1 7 1 6 1 6.7 1	31 25,69 31 47,74 32 2,71 32 40,94 32 44,73	4,340 3,994 4,704 4,140 . 5,070	8,5551 ,4935 ,6146 ,5138 ,6704	-8,9473 8,8874 9,0104 8,9129 9,0702	+0,6375 ,6014 ,6725 ,6170 ,7050	+8,4103 ,2706 ,5161 ,3291 ,5997
2981 2982 2983 2984 2985	Normæ Scorpii	6 1 6.7 2 7 2 7 2 9 2	33 44,03 34 24,12 35 24,96	4,140 5,062 4,367 4,164 3,746	-8,5131 ,6641 ,5445 ,5039 ,4352	-8,9130 9,0690 8,9532 8,9182 8,8503	+0,6170 ,7043 ,6402 ,6195 ,5736	+8,3285 ,5927 ,4031 ,3236 ,1146
2986 2987 2988 2989 2990	Scorpii Aræ	5.6 2 7 2 7 2 7 2 7 1 7 2	36 5,05 36 12,87 36 17,10	5,125 4,088 4,173 4,704 4,345	8,6613 ,4873 ,5013 ,5020 ,5301	-9,0794 8,9054 8,9201 9,0116 8,9501	+0,7091 ,6115 ,6204 ,6725 ,6380	+8,5932 ,2885 ,8227 ,4923 ,3844
2991 2992 2993 2994 2995	Normæ Aræ Scorpii	7 1 7 1 8 2 5.6 2 6.7 1	40 24,46 40 25,36	3,997 4,549 4,938 4,159 4,184	8,4646 ,5543 ,6077 ,4760 ,4767	-8,8907 8,9858 9,0510 8,9193 8,9239	+0,6017 ,6579 ,6935 ,6190 ,6216	+8,2400 ,4871 ,6268 ,2925 ,2987
2996 2997 2998 2999 3000	Scorpil	7.8 2 6.7 2 7 2 7.8 1 8 2	41 12,66 41 22,24 41 34,99	4,811 4,230 4,141 4,183 4,921	-8,5828 ,4838 ,4678 ,4738 ,5963	-9,0304 8,9318 8,9167 8,9238 9,0484	+0,6822 ,6263 ,6171 ,6216 ,6920	+8,4916 ,3162 ,2799 ,2952 ,5138
3001 3002 3003 3004 3005	Aræ Scorpii Aræ	$egin{bmatrix} 7 & 2 \\ 6.7 & 1 \\ 6 & 2 \\ 7.8 & -1 \\ 6.7 & 1 \end{bmatrix}$	42 21,44 42 22,11 42	4,029 4,542 4,235 5,242 4,696	-8,4463 ,5308 ,4782 ,6374 ,5315	-8,8979 8,9857 8,9330 9,0984 8,9954	+0,6052 ,6572 ,6268 ,7195 ,6624	+8,2290 ,4116 ,3102 ,5743 ,4184
8006 6 <b>00</b> 7 8008 8009 3010		6 6.7 2 7 3 6	45 9,60. 45 49,78	4,138 4,249 4,146 4,141 4,600	-8,4533 ,4695 ,4467 ,4420 ,5189	-8,9171 -8,9362 -8,9188 -8,9183 -8,9965	+0,6168 ,6283 ,6176 ,6171 ,6628	+8,2637 ,3037 ,2583 ,2523 ,4066
3011 3012 3013 3014 3015		7 7.8 1 7 1 7 1 7,8	45 59,77 46 58,22 47 0,67 47 46,64 48 2,25	5,183 4,091 4,610 4,975 6,160	-8,6123 ,4272 ,4976 ,5687 ,5965	-9,0901 8,9103 8,9816 9,0583 9,0869	+0,7146 ,6118 ,6542 ,6968 ,7126	+8,5459 ,2248 ,3730 ,4889 ,6283

	Declination			Logari	thms of		Diffe		he Briebane	Catalogue.
No.	(South.) Jan. 1, 1840.	Annual Precession		$\frac{}{  }$	c'	d'	No.		Ascension rom	Declin.
2971 2972 2973 2074 2975	47 25 23,35 48 26 25,74 49 19 48,15 53 51 11,58 45 2 46,95	7,702 7,691 7,675 7,675 7,675 7,621	9,5866 ,6053 ,6212 ,6902 ,5403	+9,4518 ,4582 ,4632 ,4904 ,4299	0,8866 ,8860 ,8851 ,8851 ,8820	+9,9653 ,9654 ,9656 ,9656 ,9661	5790 5792 5794 5793 5799	s. 1,82 2,35 2,93 2,42 1,99	ε. — 1,80	+ 1,96 + 3,25 + 5,80 + 5,70 - 4,56
2976 2977 2078 2979 2980	45 45 19,34 36 45 36,09 52 50 25,42 40 48 24,05 58 11	7,529 7,502 7,475 7,426 7,416	9,5575 ,3160 ,6785 ,4456 ,7482	+9,4300 ,3504 ,4732 ,3842 ,4976	0,8767 ,8752 ,8736 ,8708 ,8701	+9,9670 ,9672 ,9675 ,9679 ,9680	5805 5807 5808 5812 5811	— 2,75 — 1,79 — 2,83 — 2,10 — 2,19	— <del>4,53</del>	- 0,64 - 3,58 + 0,94 - 3,51
2981 2982 2983 2984 2985	40 48 6,29 58 2 11,70 46 13 34,77 41 18 33,46 28 32 12,20	7,416 7,339 7,285 7,204 7,193	-9,4456 9,7474 9,5717 9,4624 8,8129	+9,3836 ,4924 ,4192 ,3753 ,2343	-0,8701 ,8657 ,8624 ,8576 ,8569	+9,9680 ,9687 ,9692 ,9700 ,9700	5813 5815 5822 5824 5827	- 1,90 - 2,88 - 1,43 1,04 - 1,08	4,45	+ 1,79 + 4,95 + 1,12 - 0,16 + 1,76
2986 2987 2988 2989 2900	39 14 0,83 41 30 37,34 52 38 39,29	7,149 7,149 7,138 7,127 7,122	-0,7689 ,4065 ,4683 ,6812 ,5623	+9,4843 ,3535 ,3731 ,4514 ,4050	-0,8543 ,8543 ,8536 ,8529 ,8526	+9,9704 ,9704 ,9705 ,9706 ,9707	5828 5831 5834 5833 5837	- 2,36 - 2,69 - 1,82 - 1,68 - 2,18	2,51	+ 3,75 - 1,36 - 4,20 + 1,55 + 0,11
2991 2992 2993 2994 2995	49 45 23,96 56 5 35,41 40 56 52,23	7,035 6,958 6,793 6,793 6,739	—9,3222 ,6395 ,7316 ,4594 ,4771	+9,3207 ,4233 ,4493 ,3467 ,3487	-0,8473 ,8425 ,8321 ,8321 ,8286	+9,9714 ,9721 ,9735 ,9735 ,9739	5841 5844 5854 5857 5861	-1,82 $-2,70$		+ 1,80 - 2,45 + 2,12 - 2,47 + 3,42
2996 2997 2998 2999 3000	7 42 42 37,93 3 40 26 38,38 41 30 24,85	6,734 6,728 6,717 6,701 6,673	-9,7067 ,5051 ,4487 ,4771 ,7292	+9,4352 ,3574 ,3374 ,3456 ,4399	-0,8283 ,8279 ,8272 ,8261 ,8243	+9,9740 ,9740 ,9741 ,9743 ,9745	5859 5869 5863 5865 5866	-1,89 $-2,65$ $-3,87$		+ 0,48 + 5,01 - 4,27 + 1,32 - 1,18
3001 3002 3003 3004 3004	49 26 11,13 42 46 26,23 4 59 50	6,678 6,635 6,635 6,552 6,514	—9,3560 ,6385 ,5079 ,7774 ,6561	,4006 ,3519 ,4513	-0,8247 ,8218 ,8218 ,8164 ,8138	,9748 ,9748 ,9754	5867 5870 5871 5877 5882	- 2,03 - 0,81	- 1,14	$ \begin{array}{c c} - & \beta,48 \\ - & 0,79 \\ + & 0,70 \\ - & 4,31 \end{array} $
300 300 300 300 301	7 43 2 47,08 8 40 23 42,80 9 40 15 1,13	6,403 6,348	-9,4472 ,5172 ,4533 ,4502 ,6580	,3435 ,3161 ,3110	,8064 ,8026	,9761 ,9766 ,9770	5887 5897 5897 5897	$\begin{vmatrix} + & 3,77 \\ 1 & - & 1,95 \\ 3 & - & 1,72 \end{vmatrix}$		$ \begin{array}{c c} -4,10 \\ -3,07 \\ -2,37 \end{array} $
301 301 301 301 301	1 59 3 59,42 2 48 51 21,19 3 48 37 3,68 4 56 18 6,57	6,260 6,248 6,176	6294 7404,	3692 3692 4090	7968 7968 790	9777 9778 9788 9788	590 599 590	$\begin{vmatrix} -2,6 \\ 4 - 2,1 \\ 9 1 \end{vmatrix}$	2 110000	+ 2,87

I N	٧o.	Names.	Mag.	No.	Right Ascen.	Annual		Logarit	hms of	
		A1 0,444 124	mang.	Obs.	Jan. 1, 1840.	Precesn.	a	ь	С	d
30 30 30 30 30	18 19	Scorpii Arm Scorpii Arm	6.7 8.9 7.8 6 7	2 2 2 1	H. M. s. 16 48 3,49 49 7,07 49 36,01 50 23,34 51 12,18	8. + 4,039 4,987 4,053 4,761 4,491	-8,4113 ,5626 ,4041 ,5182 ,4681		+0,6063 ,6978 ,6078 ,6777 ,6523	+8,1944 ,4837 ,1906 ,4205 ,3398
30 30 30	121 122 123 124 125	Scorpii	7 7 7.8 6	1 -2 2 2	51 13,13 61 52 10,54 52 24,79 53 6,57	4,328 4,328 4,048 4,299 4,054	8,4404 ,4399 ,3874 ,4277 ,3827	-8,9519 ,9519 ,9052 ,9474 ,9065	+0,6363 ,6363 ,6072 ,6334 ,6079	+8,2869 ,2865 ,1717 ,2688 ,1683
30 30 30 30	26 27 28 29 30	Arm Normm Arm Scorpii	8.9 6.7 8 6 7	2 1 1 2	53 10,92 53 26,40 53 28,36 54 17,28 54 58,01	4,429 4,361 5,238 4,301 4,018	-8,4448 ,4316 ,5720 ,4156 ,3640	-8,9695 8,9582 9,0995 8,9482 8,9013	+0,6463 ,6396 ,7192 ,6336 ,6040	+8,3072 ,2832 ,5071 ,2565 ,1385
30 30 30 30	)31 )32 )38 )34 )35	Scorpii Are Scorpii	7 7.8 7 7 7.8	2 1 1 1	55 8,79 65 30,03 65 46,92 • 56 48,02 56 24,86	4,013 4,429 4,420 4,319 4,957	8,8618 ,4291 ,4253 ,4081 ,3940	-8,9005 ,9702 ,9687 ,9516 ,9413	+0,6035 ,6463 ,6454 ,6354 ,6291	+8,1348 ,2908 ,2856 ,2517 ,2259
30 30 30	36 37 38 39 40	Scorpii Area Scorpii Area	7.8 7.8 7.8 5.6	2 2 2 2 2 2	57 6,46 58 29,59 57 59,84 59 7,51 59 10,06	4,179 4,426 4,440 4,329 6,165	-8,3764 ,4123 ,4132 ,3863 ,5209	-8,9285 8,9703 8,9727 8,9542 9,0892	+0,6211 ,6460 ,6474 ,6364 ,7131	+8,1917 ,2732 ,2761 ,2308 ,4512
30 30 30 30 30	42 43	Areo	7.8 7.8 9 7.8 6.7	1 1 1 1	59 24,97 59 31,04 59 57,41 17 0 25,98 0 44,41	4,791 4,403 4,888 5,028 5,035	-8,4605 ,3964 ,4722 ,4906 ,4892	-9,0310 8,9668 9,0467 9,0685 9,0698	+0,6804 ,6437 ,6891 ,7014 ,7020	+8,3638 ,2532 ,3837 ,4121 ,4113
30 30 30 30 30	47 48 49 50	Scorpii Aræ Scorpii	6.7 7.8 6.7 6.7 6.7	2 1 2 1	1 13,73 1 36,19 4 40,93 5 27,46 9 9,09	4,126 4,462 4,096 4,349 5,142	8,3373 ,3903 ,3067 ,3417 ,4372	-8,9210 8,9771 8,9170 8,9591 9,0873	+0,6155 ,6495 ,6124 ,6384 ,7111	+8,1389 ,2654 ,0987 ,1881 ,3649
30 30 30 30	<b>5</b> 2 <b>5</b> 3 54 55	Arm Scorpii	6.7 7 6 7	2 I 2	9 39,39 9 54,77 11 16,04 11 45,35 13 2,30	5,029 5,376 4,484 4,076 4,370	-8,4153 ,4643 ,5140 ,2426 ,2791	-9,0701 9,1215 8,9828 8,9157 1,8,9642	+0,7015 ,7305 ,6517 ;6102 ,6405	+8,3357 ,4040 ,1802 ,0285 ,1276
300 300 300 300	57 58 59 60	Scorph Arm	7.8 7 7 7.8 7.8	1	13 14 16,39 14 45,17 15 0,87 16 5,62	4,078 4,733 4,657 5,240 4,473	-8,2261 ,3267 ,3100 ,3970 ,2764	8,9164 9,0240 9,0118 9,1023 8,9817	+0,6104 ,6751 ,6681 ,7193	+8,0,119 ,2220 ,1971 ,3296 ,1404

}		Declination,	Annual	<u> </u>	Logari	thms of	. : :	Diffe		ie Brisbane scension	Catalogue.
	No.	(South.) Jan. 1, 1840.	Precession	a'	<i>b'</i>	c'	$\overline{d'}$	No.	fro M.C.	m T.	Deolin:
	3016 3017 3018 3019 3020	37 21 49,81 56 25 40,87 37 41 11,91 52 59 14,61 48 5 43,75		-9,3655 ,7435 ,3802 ,6998 ,6243	+9,2707 ,4021 ,2650 ,3761 ,3406	-0,7896 ,7832 ,7805 ,7767 ,7707	-19,9784 ,9791 ,9794 ,9798 ,9803	5913 5917 5920 5921 5926	- 2,00 - 2,77 - 2,44	5.	3,87 3,04 + 1,27 + 00,9 + 6,39
	3021 3022 3023 3024 3025	44 36 40,96 44 36 37 28 45,35 43 54 37,66 37 36 28,46	5,898 5,893 5,820 5,798 5,748	—9,6587 ,5587 ; ,3766 ; ,5465 ,3820	+9,3164 ,3150 ,2473 ,3026 ,2432	-0,7707 ,7703 ,7649 ,7533 ,7595	+9,9803 ,9804 ,9809 ,9809 ,9814	5927 6929 5937 6939 5942	$ \begin{array}{r} -2,33 \\ -2,86 \\ -3,16 \\ -2,29 \end{array} $		+ 5,22 - 6,21 + 4,04 + 1,02
	3026 3027 3028 3029 3030	46 44 8,32 45 16 3,61 59 26 13,18 43 52 29,36 36 29 38,67	5,787 5,714 5,703 5,642 6,685	9,6031 ,5752 ,7818 ,5465 ,3463	+9,3191 ,3067 ,3893 ,2903 ,2197	-0,7587 ,7670 ,7561 ,7514 ,7471	+9,9814 ,9816 ,9817 ,9821 ,9824	5941 5945 5944 5949 5953	- 2,15 - 1,47 - 1,38 - 2,72 - 2,98		+ 2,00 - 0,33 + 1,70 + 3,98 - 5,94
	3031 3032 3033 3034 303 <i>6</i>	36 21 35,57 46 39 49,16 46 27 17,76 44 13 56,16 42 45 11,66	5,569 5,541 5,513 5,513 6,468	—9,3444 ,6031 ,5999 ,5563 ,5237	+9,2169 ,3034 ,2998 ,2830 ,2678	-0,7458 ,7436 ,7414 ,7414 ,7378	+9,9825 ,9827 ,9829 ,9829 ,9832	5956 5958 5959 5960 5961	- 1,83 - 4,16 - 1,07 - 1,74 - 3,66	<u> </u>	- 6,90 + 2,50 + 9,46 - 51,87 - 0,69
	3036 3037 3038 3030 3040	40 48 14,11 46 31 25,98 40 48 54,11 44 20 34,08 58 23 0,76	5,412 5,345 5,327 5,232 5,226	-9,4786 ,6021 ,6085 ,5623 ,7745	+9,2468 ,2868 ,2874 ,2612 ,3466	-0,7333 ,7279 ,7265 ,7187 ,7182	+9,9836 ,9840 ,9841 ,9847 ,9847	5964 5968 5969 5975 5973	- 3,93 -40,74 - 1,54 - 1,94 - 3,60		+ 5,96 + 3,36 + 2,52 + 1,01 + 4,57
	3041 3042 3043 3044 3045	53 9 59,69 45 58 18,58 54 38 42,13 56 35 49,96 56 41 7,25	5,204 5,204 5,159 5,119 5,091	9,7101 ,5933 ,7300 ,7643 ,7669	+9,3177 ,2712 ,3221 ,3289 ( ,3270	-0,7163 ,7163 ,7125 ,7092 ,7068	+9,9848 ,9848 ,9851 ,9853 ,9855	597.7 5978 5980 5983 5984	- 2,16 - 2,58 - 2,64 - 2,11 - 1,94		+ 3,83 + 1,66 - 9,46 + 2,92 + 3,54
	3046 3047 3048 3049 3050	47 6 56,80 38 22 59,51 44 35 20,07	5,057 5,024 4,763 4,701 4,377	-9,4425 ,6170 ,4210 ,5740 ,7745	+9,2037 ,2642 ,1690 ,2167 ,2670	0,7039 ,7010 ,6779 ,6722 ,6412	,9869 ,9874 ,9877	5992	- 2,15 - 2,09 - 2,07 - 3,03 - 2,56		- 0,65 + 6,39 - 5,28 - 0,09 + 6,44
	3051 3052 3053 3054 3056	47 18 9,58 37 38 19,99	4,332 4,309 4,201 4,161 4,063	-9,7681 ,8035 ,6284 ,4031 ,8843	+9,2652 ,2722 ,1877 ,1032 ,1541	-0,6367 ,6344 ,6233 ,6192 ,6077	+9,9896 ,9897 ,9902 ,9904 ,9910	6037 6038 6046 6049 6067	- 1,67 - 2,48 - 2,36 - 1,63 - 1,92	- 4,05 - 2,83	- 0,22 - 1,69 - 0,68 + 1,90
	3056 3057 3058 3059 3069	51 47 45,72 50 28 44,57 58 53 1,46	4,007 3,944 3,904 3,875 3,875	-9,4048 ,7007 ,6830 ,7896 ,6243	+9,0866 ,1894 ,1769 ,2189 ,1504	0,6028 ,5969 ,5915 ,5883 ,5883	+9,9911 ,9914 ,9916 ,9917 ,9917	6061 6063 6067 6069 6073	- 3,26 - 2,77 - 1,93 - 2,09	- 2,78 - 2,97	- 17 + 1,98 - 1,20 + 2,792

		N.//	No.	Right Ascen.	Annual					
No.	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	6	. <b>c</b>	d	
3061 3062 3063 3064 3065	Scorpii Aræ	7 6.7 6.7 7.8 7	2 2 2 2 1	u. M. s. 17 17 26,23 18 7,12 19 59,56 20 0,01 21 20,17	+4,329 4,045 4,427 4,429 5,326	-8,2291 ,1760 ,2176 ,2172 ,3421		+0,6364 ,6069 ,6461 ,6463 ,7264	+8,0696 7,9517 8,0739 8,0739 8,2784	
3066 3067 3068 3069 3070	Scorpii Aræ Scorpii	6.7 6.7 10 7.8 6.7	2 2 2 2 2 2	21 51,10 22 6,98 22 24,50 23 0,81 23 45,42	4,216 4,553 4,833 4,211 4,453	-8,1626 ,2151 ,2552 ,1477 ,1787	8,9405 8,9961 9,0410 8,9399 8,9798	+0,6249 ,6583 ,6842 ,6244 ,6486	+7,9799 8,0890 8,1689 7,9638 8,0384	
3071 3072 3073 3074 3075	Telescopii π Arm Scorpii λ Arm	5.6 6.5.6 7	2 1 2 2 2	24 15,45 24 58,16 26 31,70 28 3,09 29 17,62	3,908 4,912 4,120 4,607 4,480	-8,0856 ,2568 ,1027 ,1479 ,1102	8,8925 9,0537 8,9256 9,0056 8,9849	+0,5919 ,6913 ,6149 ,6634 ,6513	+7,8164 8,1468 7,8970 8,0277 7,9731	
3076 3077 3078 3079 3080		8 6.7 7.8 6.7 6.7	2 2 1 2	30 26,06 31 27,17 31 46,98 32 47,67 33 13,98	5,053 4,749 4,436 5,359 4,291	,8,1834 ,1210 ,0661 ,1908 ,0189	-9,0758 9,0287 8,9780 9,1209 8,9544	+0,7035 ,6766 ,6470 ,7291 ,6326	+8,1033 8,0159 7,9222 8,1280 7,8498	
3081 3082 3083 3084 3085	Aras	10 6.7 7 7	2 2 2 2 1	35 6,18 35 18,04 37 12,59 37 28,27 38 15,45	5,530 4,989 6,381 4,868 4,839	-8,1749 ,0941 ,1156 ,0355 ,0149	-9,1449 9,0665 9,1242 9,0480 9,0434	+0,7427 ,6980 ,7309 ,6873 ,6847	+8,1194 8,0093 8,0536 7,9410 7,9177	
3086 3087 3088 3089 8090		7.8 6.7 6.7 7	2 1	38 24,35 39 54,57 41 27,10 41 33,95 42	4,885 4,425 4,264 3,992 4,265	-8,0193 7,9131 7,8534 7,8071 7,8273	-9,0506 8,9770 8,9610 8,9079 8,9512	+0,6888 ,6459 ,6298 ,6012 ,6299	+7,9261 7067 6783 5629 6523	
3091 3092 3093 3094 3095	Arm Page 1	6.7 6 7.8 6.7	2	42 43,28 43 43,02 43 49,08 44 3,32 44 18,82	3,996 3,995 3,982 5,110 4,052	-7,7779 ,7632 ,7476 ,9189 ,7454	8,9086 8,9086 8,9065 9,0852 8,9174	+0,6016 ,6015 ,6001 ,7084	+7,5349  5100  4999  8418  ,5191	
8096 8097 8098 8099 8100		7 7.8	323	41 45 45 26,58 45 46,86 46 35,74	4,001 4,370 4,002 4,267 4;266	-7,7242 ,7712 ,7045 ,7340 ,7080	8,9096 ,9684 ,9098 ,9517 ,9516	.+0,6022 ,6406 ,6023 ,6301	+7,4828 ,6154 ,4633 ,5591 ,5328	
3101 3102 3103 3104 3106	Telescopii	7.8 6 6.7 7 6.7	1 2 1 2 2	47 20,38 48 3,77 48 42,21 50 59,61 52 27,83	4,537 4,067 4,038 4,061 5,253	-7,7270 ,6247 ,5970 ,4966 ,5997	8,9957 8,9200 8,9154 8,9177 9,1064	+0,6568 ,6093 ,6062 ,6076	+7,5963 4026 ,8662 ,2686	

<u>,  </u>	Doclination Annual		]	Logari	thms of		Differ		he Brisbane Ascension	Catalogue.
No.	Jan. 1, 1840.	Precession	a'	b'	[ c'	d'	No.		rom	Deglin.
3061 3062 3063 3064 3066	36 38 11,02 45 54 15,36	3,675 3,618 3,451 3,446 3,331	-9,5658 ,3784 ,6075 ,6085 ,8007	+9,1038 ,0323 ,0924 ,0920 ,1570	-0,5653 -,5584 -,5380 -,6373 -,5225	+9,9926 ,9928 ,9935 ,9935 ,9939	6085 6088 6099 6100 6106	- 1,74 - 2,89 - 2,42 - 3,10 - 2,55	$\begin{vmatrix} s \\ -3,27 \\ -2,54 \end{vmatrix}$	+ 6,69 - 2,03 + 1,75 + 4,94 + 0,14
3066 3067 3068 8069 3070	41 2 46,98 48 24 17,89 63 13 52,93 40 54 14,22 46 23 11,90	3,297 3,274 3,239 3,193 3,129	-9,5065 ,6532 ,7243 ,5024 ,6191	+9,0335 ,0870 ,1121 ,0183 ,0532	-0,5180 35151 ,5104 ,5041 ,4954	+ 9,9040 ,9941 ,9942 ,9944 ,9946	6109 6111 6114 6118 6121	- 2,38 - 4,09 - 1,41 - 1,92 - 2,54	- 3,09 - 3,09	- 0,42 + 2,40 - 0,58 - 1,57 + 0,06
3071 3072 3073 3074 3076	32 27 45 36 54 23 0,68 38 30 45 48 49 18 26,07 46 49 29,92	3,089 3,020 2,980 2,755 2,681	-9,2148 ,7411 ,4409 ,6702 ,6294	+8,9177 9,0881 8,9665 9,0180 8,9814	0,4898 ,4800 ,4741 ,4400 ,4233	+9,9948 ,9960 ,9961 ,9969 ,9962	6125 6127 6133 6146 6153	$ \begin{array}{r}     -3,59 \\     -2,50 \\     -2,63 \\     -2,19 \end{array} $	$\begin{array}{c} -3,12 \\ -2,16 \\ -2,16 \\ -2,95 \\ -3,18 \end{array}$	+ 1,65 - 4,85 + 1,70 - 1,00 + 2,87
\$076 3077 3078 8079 3080	66 15 55,99 51 44 20,81 45 53 4,38 59 54 54,66 42 38 51,96	2,546 2,460 2,436 2,338 2,309	-9,7664 ,7076 ,6138 ,8069 ,5490	+9,0239	-0,4059 ,3909 ,3868 ,3689 ,3635	+9,9965 ,9967 ,9968 ,9970 ,9971	6161 6166 6172 6176 6180	- 2,40 - 2,28 - 2,08 - 1,60 - 3,37	$ \begin{array}{r}  -2,18 \\  -3,07 \\  -3,08 \end{array} $	- 0.52 - 3,69 + 1,27 + 0,32 + 1,81
3081 3082 3083 3084 3086	61 38 45,51 55 20 1,41 60 6 12,16 63 33 7,90 53 4 12,08	2,135 2,124 1,956 1,938 1,869	—9,8254 ,7566 ,8109 ,7348 ,7283	+8,9721 ,9403 ,9273 ,8909 ,8724	-0,3295 ,3271 ,2913 ,2874 ,2715	+9,9975 ,9975 ,9979 ,9980 ,9981	6193 6200	- 2,32 - 2,08 - 2,62 + 2,29	- 2,69 - 3,43 - 2,01 - 2,22	+ 3,89 - 3,06 - 3,62 - 8,71
3086 3087 3088 3089 3090	53 46 35,64 45 32 43,71 41 56 15,55 34 44 54,94 41 56	1,857 1,713 1,596 1,584 1,503	—9,7380 ,6096 ,5353 ,5343 ,6363	+8,8736 ,7881 ,7260 ,6637 ,6999	-0,2688 ,2364 ,2029 ,1998 ,1769	+9,9981 ,9984 ,9986 ,9986	6209 6220 6227 6228 6233	- 3,22 - 1,66 - 2,81 - 1,57	- 1,83 - 3,60 - 3,43	- 3,85 - 2,69 - 2,06 - 4,24
3091 3092 3093 3094 3095		1,480 1,398 1,386 1,363 1,346	-9,3304 ,3304 ,3139 ,7767 ,3874	+8,6251 ,6004 ,5923 ,7656 ,6007	-0,1701 ,1455 ,1419 ,1345 ,1289	+9,9988 ,9989 ,9990 ,9990 ,9990	6238 6243 6246 6246 6246	- 1,97 - 3,24 - 1,82 - 2,90 - 2,42	3,51 	- 8 30 - 4 10 - 1 38 - 0,98 - 0,23
3096 3097 3098 3098 3100	44 18	1,805 1,270 1,247 1,212 1,142	—9,3365 ,5866 ,3385 ,5366 ,5366	+8,5723 ,6461 ,6616 ,6066 ,6806	-0,1166 ,1038 ,0968 ,0834 ,0577	+9,9991 ,9991 ,9992 ,9992 ,9993	6250 6253 6255 6256 6256	- 1,29 - 2,30 - 1,20		- 6,38 + 0,30 + 6,65
3101 3102 3103 3104 3105	35 59 53,02 36 21 46,02	1,078 1,014 0,961 0,757 0,623	-9,6503 ,4014 ,3729 ,3874 ,7973	+ 8,6000 ,4819 ,4503 ,3506 ,4241	- 0,0326 0,0060 9,9830 9,8795 9,7949	+9,9994 ,9995 ,9997 ,9998	6262 6266 6269 6281 6288	$\begin{array}{c} -3,15 \\ -0,76 \\ -1,63 \\ +0,17 \\ -2,88 \end{array}$	•	+ 1 2 3 3 3 8 3 3 8 3 3 8 3 3 8 3 3 8 3 3 8 3 3 8 3 3 8 3 3 8 3 3 8 3 3 8 3 3 8 3

7.	<u> </u>		No.	Right Ascen.	Annual		Logarit	hms of	
No.	. Names.		Obs.	Jan. 1, 1840.	Precesn.	a	b	c	d
3106 3107 3108 3108 3109	Telescopii Pavonis Telescopii	6.7 .7.8 .8 .7 .7	2 2 2 2 1	n. m. s. 17 64 4,44 64 44,95 54 64,56 55 33,98 55 50,25	# 4,035 4,065 4,069 5,544 6,296	7,3085 ,2472 ,2341 ,3946 ,3247	8,9153 8,9200 8,9191 9,1529 9,1120	+0,6058 ,6091 ,6084 ,7469	+7,0767 ,0241 ,0094 ,3407 ,2579
111 112 113 114 1115	Teloscopii	6.7 8 6.7 7	$\frac{2}{1}$	55 35,44 56 58 3,39 58 31,76 58 59,77	4,039 4,061 4,448 4,063 4,528	-7,1721 7,0733 6,8766 6,6139 6,4582	8,9160 ,9193 ,9815 ,9197 •	+0,0063 ,6080 ,6482 ,6088 ,6569	+6,9416 ,8489 ,7329 ,3902 ,3261
3116 3117 3118 3119 3120	Arm Telescopii	7 7.8 6 7 7.8	22333	18 0 24,82 0 59,60 3 38,61 4 24,99 5 0,98	4,694 4,006 5,053 4,724 4,061	+6,5263 6,6533 7,3189 7,3411 7,2662	9,0212 8,9108 9,0770 9,0260 8,9193	+0,6715 ,6026 ,7035 ,6743 ,6086	-6,4142 6,4124 7,2379 7,2323 7,0617
3121 3122 3123 3124 3125	Payonis Tolescopii Sagittarii	6.7 8 8 9 6	3 2 3 1	8 28,79 8 32,28 9 49,23 11 23,27 12 2,76	4,067	+7,7367 ,7266 ,5660 ,7770 ,6460	-9,1456 9,1355 8,9202 9,0649 8,9194	+0,7429 ,7370 ,6093 ,6970 ,6089	-7,6808 ,6679 ,343 ,690 ,482
3126 3127 3128 3129 3130	Telescopii	7 6.7 5.6	2 2 2	12 12 16 9,58 17 23,31 17 53,92	4,150	+7,8388 -,8097 -,9546 -,8205 -,8921	-9,0891 9,0510 9,0939 8,9326 8,9913	+0,7105 ,6989 ,7134 ,6180 ,6544	,758
3131 3132 3133 3134 3135		7.8 8 8 8 7.8	2	19 18,97 19 27,8 21 21,1	5 4,516 5,266 6 4,912	7,9265 8,0470 8,0317	8,9919   9,1079   9,0548	,6547 7215 6913	7,793 7,979 7,940 7,927
3136 3137 3138 3139 8140	Pavonis	7.8 9.1 7 9	10	22 55,6 23 12,8 2 23 27,2	2 5,254 9 <b>5</b> ,064 5 <b>5</b> ,918	,1163 ,0921 ,2168	,1000 ,0778 ,1953	,7205 ,7015 ,7719	8,04 8,01 8,17 8,17
3141 3142 3146 3146	Теlевсоріі	7 7 7 7 6	8	3 27 7,7 3 29 23,7 3 33 24,8 3 34,34,7	0 4,55 6 4,70 0 4,558	1 ,112 1 ,191 3 ,169	l 8,9960 5 9,0200 1 8,9979	668 658 658	7,98 8,08 8,08 8,04 9,08
3147 3147 3148 3148 316	B Valentopii	7. 6 8	8	- 34 - 34 3 35 5,0 2 39 57,0 2 40 91;	35   4,769	,198 9 ,201 9 ,280	5   9,008 0   9,008 6   9,030	7 ,6656 7 ,666 6 ,078	6 5 1,08

	Declination.	Annual		Logarit	hms of		Diffe		e Brisbane scension	Catalogue.
No.	(South ) Jan. 1. 1840.	Procession		b' 1	- c'	<i>d'</i>		] fr	om :	Declin.
3106 3107	35 53 53,37	- 0,495	9,3692	+8,1613	-9,6960	+9,9999	No.	M. C 2,29	T.	- 3,68
3108 3109 3110	36 45 12,48 36 34 47,28 62 1 24,38 59 3 3,87	0,425 0,414 0,350 0,326	,3980 ,3944 ,8325 ,8021	,1040 ,0902 ,1879 ,1462	,0289 ,6169 ,6438 ,6138	,9999 ,9999 ,9999 ,9999	6299 6300 6303 6305	+ 1,05 0,64 2,51 1,34	<u> 1,69</u>	+ 3,88 + 7,69 + 0,10
3111 3112 3113 3114 3116	36 1 28,74 36 37 44 56 36 41 14,30 47 31 52,14	0,361 0,286 0,139 0,099 0,058	-9,3747 ,3944 ,6191 ,3962 ,6484	+8,0255 7,9295 7,7003 7,4704 7,3316	-9,6680 9,4658 9,1459 8,9961 8,7666	+9,9999 0,0000 0,0000 0,0000 0,0000	6306 6309 6314 6322 6325	$ \begin{array}{r} -2,37 \\ -0,02 \\ -3,16 \end{array} $		- 1,83 - 6,08 - 0,31
3116 3117 3118 3119 3120	50 34 53,04 35 3 3,84 56 3 47,42 51 0 34,67 36 36 50,96	+ 0,064 0,110 0,350 0,414 0,466	—9,6964 ,3404 ,7694 ,7042 ,3944	7,3930 7,5016 8,1608 8,2062 8,1424	+8,8070 9,0444 9,5438 9,6169 9'6687	+0,0000 0,0000 9,9999 9,9999 9,9999	6334 6336 6347 6350 6356	- 2,31 - 1,04 - 2,59 - 4,25 - 1,86	$ \begin{array}{r} -3,08 \\ -3,32 \\ -3,05 \end{array} $	$\begin{array}{c c} -1,73 \\ -10,24 \\ -1,53 \\ +1,21 \\ -7,52 \end{array}$
3121 3122 3123 3124 3126	61 33 18,66 60 48 37,76 36 60 4,66 56 1 41,46 36 44 12,11	0,781 0,781 0,887 1,031 1,067	-9,8274 ,8196 ,4024 ,7651 ,3962	8,5348 ,5318 ,4232 ,6249 ,5027	+9,8926 9,8926 9,9479 0,0134 0,0279	+9,9997 ,9997 ,9996 ,9994 ,9994	6366 6368 0372 6378 6382	$ \begin{array}{r} -2,99 \\ -1,13 \\ -0,92 \\ -3,42 \end{array} $	- 2,85 - 3,57	$\begin{array}{c} + & 3,81 \\ - & 1,69 \\ - & 8,18 \\ -10,07 \\ + & 0,23 \end{array}$
3120 3127 3128 3129 3130	57 10 53 43 57 36 40,84 39 5 0,76 47 18 46,61	1,126 1,148 1,460 1,544 1,690	-9,7810 ,7388 ,7863 ,4639 ,6426	-8,6736 ,6643 ,7861 ,6862 ,7658	+0,0510 ,0599 ,1615 ,1886 ,2013	+9,9993 ,9993 ,9989 ,9987 ,9986	6383 6386 6399 6406 6411	$ \begin{array}{r}  - 0,26 \\  - 2,42 \\  - 2,39 \end{array} $		- 1,08 - 0,16 + 0,33
3131 3132 3133 3134 3135	66 22 44,69 47 24 39,03 58 48 21,55 54 11 39,04 52 59 53,00	1,607 1,718 1,735 1,892 1,915	-9,8686 ,6434 ,7973 ,7427 ,7275	-8,8662 ,8001 ,8696 ,8840 ,8826	+0,2061 ,2349 ,2393 ,2769 ,2822	+9,9986 ,9984 ,9984 ,9981 ,9980	6416 6416 6422 6424	— 1,69 — 1,71	$ \begin{array}{r}  - 2,10 \\  - 0,62 \\  - 3,59 \\  - 7,50 \end{array} $	+ 2,83 + 6,62 + 0,84 + 2,24 + 4,77
3136 3137 3138 3139 3140	52 29 40,98 58 42 5,81 56 20 19,72 64 59 8,01 59 14 31,04	1,967 2,037 2,060 2,095 2,141	9,7202 ,7969 ,7686 ,8561 ,7993	-8,8913 ,9387 ,9322 ,9764 ,9625	+0,2939 ,3090 ,3139 ,3211 ,3307	+9,9979 ,9977 ,9977 ,9976 ,9976	6426 6431 6434 6436 6437	- 2,45 - 2,12 + 2,83 - 3,87	- <del> </del>	- 3,72 - 2,64 + 0,30 - 8,71 -4,68,88
3141 3142 3143 3144 3145	48 2 17,15 48 13 34,34 51 1 31,94 48 24 58,94 50 15 4,67	2,396 2,593 2,939 2,946 3,037	-9,6513 ,6632 ,6965 ,6661 ,6830	8,9489 8,9844 9,0669 9,0411 9,0664	+0,3795 ,4138 ,4682 ,4691 ,4825	+9,9969 ,9963 ,9963 ,9963 ,9949	6448 6469 6471 6472 6474	- 2,32 - 1,47 - 2,91 - 5,99		+ 3,63 + 1,66 + 2,59 + 4,43 - 8,18
3146 3147 3148 3149 3150	49 47 49 47 49 47 21,46 52 16 57,79 44 42 55,28	3,060 3,006 3,083 3,509 3,555	9,6767 ,6767 ,6758 ,7110 ,5855	0,0667 ,0675 ,0700 ,1414 ,0962	+0,4857 ,4866 ,4890 ,6452 ,5308	+9,9949 ,9949 ,9948 ,9932 ,9931	6475 6476 6477 6502 6507	- 2,46 - 2,38 - 2,37	- 18 <b>6</b>	1 1 1 to

		<u> </u>	No.	Right Asoen.	Annual	<del></del>	Logarit	hma of	
No.	Names.		) bu	Jan. 1, 1840.	Precean.	a	<i>b</i>	0	d
3151 3152 3153 3154 3155	R° Teleacopii  Cor. Auat. Telescopii  Payonia	7 6.7 6.7 7 6	3 2 3 3 3	H. M. a. 18 40 32,19 40 54,85 40 53,42 42 12,32 44 22,19	4,757 4,555 4,247 4,637 5,375	+8,2844 ,2560 ,2044 ,2825 ,4186	9,0386 8,9958 8,9450 9,0089 9,1219	+0,6773 ,6585 ,6281 ,6662 ,7304	-8,1815 ,1307 ,0289 ,1672 ,3578
3156 3157 3158 3159 3160	Telescopii Cor. Aust. Telescopii Cor. Aust.	7.8 7 6.7 6.7 6	3 3 2 3 3	44 20,19 44 32,04 45 40,97 45 39,12 45 49,36	4,586 4,076 4,338 4,814 4,074	+8,2956 ,2132 ,2669 ,3454 ,2249	-9,0003 8,9165 8,9590 9,0370 8,9158	+0,6614 ,6102 ,6373 ,6825 ,6100	8,1746 7,9983 8,1095 8,2485 8,0097
3161 3162 3163 3164 3165	Telescopii	7.8 7.8 8 6	1 2 2 2 -	46 45,93 47 7,77 47 43,85 47 55,76 47	4,408 4,951 4,596 4,065 4,062	+8,2899 ,3802 ,3295 ,2432 ,2487	8,9705 9,0583 9,0014 8,9139 8,9134	+0,6442 ,6947 ,6624 ,6096 ,6087	8,1446 ,2947 ,2104 ,0262 ,0249
3166 3167 3168 3169 3170	Telescopii	7.8 8 7.8 7	3 2 3 2	48 33,97 49 38,33 50 50 17,04 50 14,53	4,543 5,168 5,166 5,168 4,060	+8,3280 ,4280 ,4425 ,4427 ,2630	-8,9925 9,0913 9,0908 9,0910 8,9124	+0,6573 ,7133 ,7131 ,7133 ,6085	8,2024 ,3571 ,3716 ,3719 ,0451
3171 3172 3173 3174 3175	Sagittarii  Telescopii Sagittarii A Sagittarii	7 7 6,7 7	2 2 3 3 2	51 4,58 51 15,41 53 39,33 54 33,85 54 51,65	4,650 4,478 4,765 4,845 4,536	+8,3684 ,3411 ,4083 ,3963 ,3805	-9,0097 8,9812 9,0979 9,0083 8,9902	+0,6674 ,6511 ,6781 ,6670 ,6567	-8,2560 ,2071 ,3082 ,2841 ,2552
3176 3177 8178 3179 3180	Payonis Telescopii Cor. Auat.	5.6 8.9 6.7 6 7	2 3 3, 4	55 5,66 55 35,38 55 36,48 58 34,93 19 0 24,39	*3,591 5,501 4,986 4,082 4,645	+8,2352 ,5353 ,4600 ,3335 ,4407	-8,8439 9,1385 9,0627 8,9136 9,0071	+0,5552 ,7404 ,6977 ,6109 ,6670	-7,8082 8,4810 8,3783 8,1242 8,3296
3181 3182 3183 3184 3186	Telescopli Sagittarii Telescopil	7.8 6.7 8 6	23   33	1 6,12 4 42,67 4 7 8,48 9 55,88	5,150 4,884 4,999 4,695 4,867	+	-9,0869 8,9622 9,0632 9,0139 9,0413	+0,7118 ,6419 ,6989 ,6716 ,6878	8,4556 ,2839 ,4504 ,3911 ,4536
3186 3188 3189 3190	Sagittarii	7 7.8 6.7 7.8	3 2 2 2	10 12,22 10 46,46 11 3,12 11 15,23	4,670 4,834 3,600 4,965 3,590	+8,5112 ,5420 ,3445 ,5659 ,3470	—9,0090 9,0369 8,837 <i>5</i> 9,0 <i>6</i> 67 8,837 <b>3</b>	+0,6698 ,6843 ,5563 ,6959 ,5551	8,4049 8,4513 7,9307 8,4863 7,9334
3191 3192 3193 3194 3196	Telescopii  Pavonis Telescopii	7 7 7 8 7.8	3 3 3 3 3	12 47,81 14 56,09 17 34,60 18 9,43 19 8,42	4,857 4,850 4,895 5,800 4,829	+8,5253 ,6703 ,6930 ,6590 ,65910	—9,0063 ,0375 ,0442 ,1067 ,033 l	+0,6681 ,6857 ,6897 ,7243 ,6869	-8,4183 ,4817 ,6080 ,6991 ,6016

	Declination.	Annual		Logarii	hms of	<u></u>	Differ		e Brisbane e scension	Catalogue.
No.	(South.) Jan. 1. 1840.	Precession	a'	<i>b'</i>	c'	d'	No.	M.C.		Declin.
3151 3152 3153 3154 3156	52 6 45,55 48 32 19,36 41 53 14,40 50 3 55,99 60 24 1,37	+ 3,555 3,589 3,583 3,698 3,893	—9,7076 ,6532 ,5237 ,6767 ,8055	—9,1460 ,1277 ,0769 ,1507 ,2276	+0,5508 ,5550 ,5543 ,5680 ,5902	+9,9931 ,9929 ,9929 ,0925 ,9916	6506 6509 6511 6516 6522	- 2,20 - 0,07	$ \begin{array}{c c}  & 2,02 \\  & -2,68 \\  & -2,58 \end{array} $	" - 1,77 + 1,29 - 6,45 - 4,27 + 4,48
3166 3167 3168 3169 3160	49 11 5,79 37 34 45,68 44 6 48,07 53 8 23,47 37 32 22,95	3,881 3,893 3,990 3,995 4,001	-9,6609 ,4048 ,5682 ,7193 ,4031	-9,1660 ,0734 ,1417 ,2028 ,0851	+0,5890 ,5902 ,6009 ,6016 ,6022	+9,9917 ,9916 ,9912 ,9912 ,9913	6523 6524 6530 6528 6532	- 2,54	- 4,02 - 2,20 - 3,04 - 3,77	+ 0,40 - 6,45 + 2,79 - 1,85 - 0,16
3161 3162 3163 3164 3165	48 42 29,43 55 13 31,39 49 28 46,63 37 18 32,26 37 16	4,093 4,115 4,172 4,184 4,184	-9.5900 ,7451 ,6637 ,3944 ,5927	-9,1648 ,2270 ,1993 ,1626 ,1018	+0,6120 ,6144 ,6204 ,6216 ,6216	+9,9907 ,9906 ,9904 ,9903 ,9903	6535 6536 6539 6542 6543	- 8,78 - 3,05 - 2,62		+ 3,82 -12,37 + 1,85 - 2,96
3166 3167 3168 3169 3170		4,241 4,252 4,395 4,395 4,383	-9,6474 ,7789 ,7781 ,7781 ,3909	-9,1999 ,2557 ,2701 ,2702 ,1220	+0,6274 ,6286 ,6429 ,6429 ,6418	+9,9900 ,9900 ,9893 ,9893 ,9894	6547   6545   6553   6556   6556	$-\frac{1}{2,42}$		$\begin{vmatrix} + & 1,16 \\ -14,10 \\ - & 2,12 \\ - & 1,66 \end{vmatrix}$
3171 3172 3173 3174 3175	47 15 56,82 52 33 56,43 56 33 19,72	4,463 4,474 4,678 4,758 4,780	—9,6776 ,6243 ,7069 ,6758 ,6444	-9,2353 ,2148 ,2680 ,2632 ,2522	+6,6496 ,6507 ,6701 ,6774 ,6795	+9,9890 ,9889 ,9878 ,9874 ,9873	6559 6560 6567 6568 6568	$\begin{array}{c c} - 2,14 \\ - 3,96 \\ - 1,04 \end{array}$	- 2,00 - 2,86	- 6,02 + 1,03 + 3,07 - 3,36 + 4,03
3176 3177 3178 3179 3180	61 57 28,26 55 57 15,06 38 8 42,75	4,792 4,848 4,854 5,097 5,249	+8,6021 -9,8142 ,7489 ,4082 ,6739	1960,	,6856 ,6861 ,7073	,9869 ,9869 ,9855	6570 6573 6573 6580 6593	$\begin{vmatrix} -1,39 \\ +1,02 \\ -2,09 \end{vmatrix}$	3,35	$ \begin{array}{c c} + & 2,20 \\ - & 7,38 \\ - & 0,01 \\ - & 2,87 \end{array} $
318 318 318 318 318	2 45 44 11,37 56 25 51 51 4,02	5,625 5;63 <b>0</b> 5,815	-9,7723 ,5843 ,7474 ,6848 ,7218	,3032 ,3693 ,3682	,750l ,7505 ,7645	,9822 ,982 <b>1</b> ,9809	6596 660 660 661 662	$\begin{bmatrix} -1,60 \\ 8 \\ -1,69 \end{bmatrix}$	16 TO	+ 1,21
318 318 318 318 319	7 54 14 24,11 5 22 41 33,99 9 56 11 2,69	6,121	-9,6776 9,7162 +8,5186 -9,7388 +8,5186	,3941 ,0719 ,4071	,7808 ,7876 ,7896	,9787 ,9786 ,9784	663 664 664	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		$\begin{array}{c c} + 3,46 \\ + 7,47 \\ - 3,56 \\ \hline \end{array}$
319 319 319 319 319	2 54 38 10,98 55 25 46,84 4 60 35 28,29	6,470 6,694 6,734	,7168 ,7243 ,7832	4204 4387 4664	8109   8251   8283	9761 9744 9740	,665 ,666	$ \begin{array}{c cccc} 6 & - & 2.43 \\ - & & 2.13 \\ 9 & & & - \\ \end{array} $	0	3 - 2,10 6 + 7,69

			No.	Right Ascen.	Annual		Logarit	hms of	
No.	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	ь	c	d
3196 3197 3198 3199 3200	Telescopii D Sagittarii Telescopii	6.7 6 7.8 7.8 7.8	3 4 3 2 3	H. M. S. 19 20 14,71 23 19,84 24 56,87 27 30,47 27 57,13	**************************************	+8,5867 ,5547 ,6644 ,6367 ,6353	9,0221 8,9725 9,0727 9,0301 9,0274	+0,6779 ,6508 ,7062 ,6833 ,6819	8,4919 ,4288 ,5943 ,5479 ,5463
3201 3202 3203 3204 3205	λι:	6 8 6.7 6.7 6.7	33333	34 55,68 36 25,57 37 8,05 38 32,08 39 51,75	4,931 5,148 5,139 4,413 4,819	+8,6909 ,7329 ,7351 ,6191 ,6959	9,0460 9,0802 9,0787 8,9561 9,0262	+0,6929 ,7116 ,7109 ,6447 ,6830	—8,6132 ,0688 ,6707 ,4898 ,6111
3206 3207 3208 3209 3210	Telescopii Indi	7 8 7 7	3 3 4	40 40,09 42 54,91 43 37,77 43 41,86 48 14,01	5,300 4,745 5,090 5,014 5,111	1-8,7764 ,6978 ,7577 ,7467	-9,1025 ,0127 ,0695 ,0572 ,0716	+0,7243 ,6762 ,7067 ,7002 ,7085	
3211 3212 3213 3214 3215	Telescopii	7.8 6.7 6 7.8	න [නනන	53 42,65 54 54 57,20 55 6,18 55 55,68	4,306 4,648 4,768 4,639 4,619	+8,6650 ,7288 ,7536 ,7314 ,7311	-8,9303 8,9919 9,0127 8,9900 8,9861	+0,6341 ,6765 ,6783 ,6604 ,6045	8,5258 ,6334 ,6692 ,6355 ,633 <i>5</i>
3217 3217 3218 3219 3220	Apparament or other	7.8 6.7 7.8 7	5 3 3 3 6	58 5,66 20 2 9,50 5 41,47 7 26,15 7 30,10	4,924 4,589 4,646 4,336 4,970	+8,7932 ,7606 ,7564 ,7229 ,8384	-9,0385 8,9782 8,9691 8,9288 9,0432	+0,6923 ,6617 ,6676 ,6371 ,6964	-8,7216 ,6524 ,6552 ,6953 ,7724
322 322 322 322 322 322	Indi	$\begin{bmatrix} \frac{7}{7} \\ \frac{1}{7} \\ 6.7 \end{bmatrix}$	6 3 3	7 8 3,61 8 9 16,87 10 2,21	4,969 4,717 4,718 4,436 4,432	+8,8388 ,7964 ,7967 ,7494 ,7515	-9,0430 8,9992 8,9993 8,9469 8,9456	+0,6963 ,6737 ,6738 ,6470 ,6466	-8,7728 ,7125 ,7130 ,6368 ,6387
322 322 322 322 323	7 8 9 Pavonis 0 \$\psi\$	7.8 6.7 8.9 6	3 3 2	16 45,61 22 17,48	4,052 4,077 4,043 4,926 5,038	-1-8,6818 ,6936 ,6938 ,8664 ,9054	8,8721 8,8756 8,8675 9,0328 9,0495	+0,6077 ,6103 ,6067 ,6925 ,7023	—8,5008 ,5201 ,5133 ,8007 ,8277
323 823 328 328 323	1	6 7.8 5.6 6.7 7	3 3 3	26 44,35 29 11,31 32 15,47 32 23,48 36 22,80	3,952	+8,9165 ,7763 ,8299 ,7312 ,7860	-9,0428 8,8934 8,9348 8,8358 8,8748	+0,6993 ,6265 ,6470 ,6968 ,6187	8,8586 ,6429 ,7292 ,5402 ,6460
323 323 323 323 324	7 2 Indi Microscoph	8 6 6 7	3 2 3 3 3	37 65,44 38 27,26 39 64,31 40 43,28 47 3,72	4,162 4,385 3,879	+8,7750 ,7942 ,8452 ,7406 ,7960	8,8581 ,8744 ,9201 ,8129 ,8441	+0,6109 ,6193 ,6420 ,5887 ,6077	-8,6211 ,6569 ,7428 ,5346 ,6430

<del></del>		1		Logarith		<del></del>	Differ	ence from th		Catulogue.
No.	Declination. (South.)	Annual Procession		b'	- c'			Right A	ım İ	Declin.
3196	Jan. 1, 1840.		9,6964	9,4423	+0,8391	+9,9726	No.   6672   6689	M. C.   s.   	T. 5. 5.24	- 4,19 + 1,74
3197 3198 3199 3260	48 26 7,12 58 19 34,75 54 46 24,22 54 34 0,11	7,155 7,291 7,497 7,529	,6138 ,7 <i>5</i> 20 ,7050 ,7016	,4267 ,4908 ,4851 ,4858	,8546 ,8628 ,8749 ,8767	,9704 ,9692 ,9673 ,9670	6696 6767 6708	- 3,15 - 2,97 - 2,62	— 6,07 — 4,21 — 4,87	+ 2,28 6,89 4,50
3201 3202 3203 3204 3205	56 44 16,56 59 39 7,06 59 35 2,57 47 56 52,09 55 22 14,24	8,093 8,215 8,274 8,380 8,486	—9,7218 ,7643 ,7620 ,6832 ,6972	-9,5284 ,5486 ,5514 ,4919 ,5420	+0,9081 ,9146 ,9177 ,9232 ,9287	+9,9613 ,9660 ,9694 ,9683 ,9671	6725 6731 6733 6738 6745	- 2,36 - 3,67 - 3,29 - 3,08 - 4,52	— 2,73 — 2,49 — 2,66 —	- 1,54 - 4,33 + 0,45 + 2,32 - 5,72
3206 3267 3208 3209 3216	54 21 20,67 59 18 46,05 58 20 9,67	8,654 8,728 8,785 8,791 9,145	-9,7694 ,6794 ,7411 ,7306 ,7411	-9,5744 ,5488 ,5763 ,5720 ,5959	+6,9322 ,9409 ,9438 ,9446 ,9612	+ 9,9563 ,9543 ,9537 ,9536 ,9493	6747 6757 6759 6760 6775	- 3,30 - 1,57 - 3,57 - 3,03 - 3,04	$-\frac{3,07}{4,28}$	- 1,55 - 3,84 + 2,63 - 3,55 - 0,51
3211 3212 3213 3214 3216	53 24 55 28 3,91 53 19 50,36	9,563 9,599 9,665 9,675 9,736	—9,5302 ,6493 ,6767 ,6464 ,6405	-9,6396 ,6849 ,6990 ,6879 ,5889	+0,9806 ,9822 ,9852 ,9867 ,9884	+9,9439 ,9435 ,9426 ,9424 ,9415	6790 6791 6793 6794 6799	$-\frac{1,73}{-2,61}$	<u>- 2,67</u>	$ \begin{array}{r} + 1,90 \\ - 0,42 \\ + 0,04 \\ - 6,43 \end{array} $
321 321 321 321 321	7 52 54 56,25 52 23 57,96 9 48 11 55,49	10,212 10,472 16,591	-9,7056 ,6274 ,6128 ,5366 ,7050	,6090 ,6169 ,5953	+0,9958 1,0091 ,0200 ,0249 ,0257	,9289	6803 6814 6821 6826 6826	$\begin{vmatrix} -2.57 \\ -2.73 \\ -12.12 \end{vmatrix}$	- 2,70 - 1,79 	+ 1,61 + 0,06 - 4,42 + 1,03 + 1,74
322 322 322 322 322	2 55 32 33,31 3 55 32 4 50 30 <b>42,</b> 88	$\begin{array}{c c} & 16,656 \\ \hline 9 & 10,738 \end{array}$	,6561 ,5740	,6414 ,6417 )   ,6164	,0271 ,0273 ,0309	,9280 ,9279 ,9265	682 683 633	$\begin{bmatrix} -4,29 \\ 6 \\ -2,75 \end{bmatrix}$	——————————————————————————————————————	-7,10
323 323 323 323 323	27   42 8 28   41 18 17,3 29   59 17 35,2	$\begin{array}{c c} & 11,613 \\ 4 & 11,158 \\ 3 & 11,289 \end{array}$	,3766 ,346 ,688	,5665 ,5652 ,6851	,0419 ,0476 ,0526	9218 9194 9171	0   684 1   685 1   685	$\begin{bmatrix} 8 \\ 1 \\ - 2,40 \\ 5 \\ - 1,33 \end{bmatrix}$		
32 32 32 32 32	82   47 22 50,6 33   52 29 7,4 34   40 7 30,3	$ \begin{array}{c cccc} 60 & 12,153 \\ 12 & 12,386 \\ 66 & 12,386 \end{array} $	,463 ,566 ,246	9   ,6498 3   ,696 5   ,599	3.   ,0856 1   ,092 0   ,092	0   ,000° 7   ,895 9   ,896	2   689 6   690 5   690	$ \begin{vmatrix} 0.4 & -2.53 \\ 0.4 & -1.66 \\ 3.5 & -2.83 \end{vmatrix} $	$\begin{array}{c c} 3 & - & - \\ 3 & - & 2,4 \\ 3 & - & 4,6 \end{array}$	-   + 0.52 0   $- 0.68$
32 32 32	36 44 33 59,6 37 46 48 43,3 38 52 11 52, 39 38 30 7,4 44 41 42,	38   <b>12</b> ,80 15   12,96 41   12,94	2   ,423 4   ,528 9   ,130	16 ,668 39 ,706 30 ,604	$egin{array}{c ccccccccccccccccccccccccccccccccccc$	/3 ,885 )72 ,883 <b>32</b>	9   69 17   69 17   69		$ \begin{array}{c c} 7 & -4,0 \\ 1 & -1,0 \\ 0 & -1 \end{array} $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

)	21	M	No.	Right Ascen.	Annual		Logari	tlims of	
No.	Names.	Mag.	Obв.	Jan. 1, 1840.	Precesn.	а	b	c	d
3241 3242 3243 3244 3246	<ul><li>✓ Indi</li><li>Mioroscopii</li><li>Indi</li></ul>	6.7 6.7 7 - 7.8	332 3	H. M. B. 20 48 56,31 48 58,80 49 19,92 50 52 6,14	s -1-4,327 4,444 4,008 4,002 4,726	+8,8614 ,8865 ,8932 ,7955 ,9536	8,9022 ,9270 ,8324 ,8302 ,9822	+0,6362 ,6478 ,0029 ,6023 ,6745	8,7672 ,7963 ,6319 ,6341 ,8891
3246 3247 3248 3249 3250		6.7: 7 7	23333	52 10,33 53 25,82 54 50,59 56 9,15 50 48,41	3,861 4,471 4,780 4,430 4,190	+8,7690 ,9064 ,9730 ,9062 ,8559	-8,7975 ,9299 ,9914 ,9190 ,8665	+0,5867 ,6504 ,6794 ,6464 ,6222	8,5691 ,8215 ,9131 ,8187 ,7379
3251 3252 3253 3254 3255	Piscis, Aust.  Mioroscopii  Indi	7 6.7 7 7.8	တဘဘဘဘ	56 37,13 56 59,30 57 58,41 58 41,21 59 36,79	3,688 4,058 4,718 4,433 4,531	+8,7440 ,8264 ,9717 ,9161 ,9387	-8,7549 ,8367 ,9780 ,9189 ,9390	+0,5068 ,6083 ,6737 ,6467 ,0562	-8,4796 ,6833 ,9093 ,8295 ,8030
3256 3257 3258 3259 3260	Indi	7 6.7 7 8.7	တက္သတ္သက္	59 37,18 1 56,07 3 37,95 3 0,75 4 17,98	3,981 3,878 4,509 4,645 4,337	+8,8163 ,7990 ,9599 ,9770 ,9117	-8,8166 ,7906 ,9447 ,9603 ,8942	+9,5999 ,5886 ,6598 ,6670 ,6372	8,0581 ,6149 ,8896 ,9126 ,8191
8261 3269 8263 3264 3266	Indi Microscopii Indi 9 Microscopii	7.8 5.6 7	1 2334	4 4 6 56,90 8 25,30 8 34,69	4,689 3,847 4,133 4,322 4.066	+8,9877 ,7997 ,8729 ,9212 ,8615	-8,9690 ,7800 ,8463 ,8880 ,8279	+0,6711 ,5861 ,6163 ,6357 ,6354	-8,9267 ,6091 ,7529 ,8297 ,7305
3266 3267 8268 3269 3270	Indi Microscopii A Pisois. Aust. Indi	7.8 7.8 7.8 6.7 7.8	3 3 3 2	12 66,28 13 40,80 16 2,06 16 21,98 17 0,94	4,485 4,026 8,998 3,763 4,222	+8,9719 ,8668 ,8663 ,8092 ,9241	-8,9215 ,8136 ,8042 ,7458 ,8581	+0,6518 ,6049 ,6018 ,6755 ,6255	-8,8999 ,7328 ,7385 ,6034 ,8262
3271 8272 3273 3274 \$286	India	6.7 8 8	3 3 3 3	17 41,38 19 10,00 19 57,97 20 57,97	4,279 4,565 4,422 4,569 4,114	+8,9396 9,0095 8,9781 9,0164 8,9335	-8,8711 ,9362 ,9035 ,9350 ,8241	+0,6313 ,6594 ,6466 ,6598 ,6143	8,8496 ,9474 ,9045 ,9056
9276 9278 9278 9280	Indi	7.8 6.7 7.8	7 7	25 43,99 28 31,96 28 28 47,47 29 1,48	4,135 4,385 4,376 4,125 4,373	+8,9290 ,9991 ,9971 ,9854 ,9978	8,8294 ,8885 ,8865 ,8237 ,8864	+0,6165 ,6420 ,6411 ,6164 ,6408	-8,8260 ,9282 ,9254 ,8365
\$287 6282 8283 8284 6286		8 6.7 8.9 7.8 6.7	3 2 2 3	29 4,02 29 13,45 30 47,38 31 37,94 32 17,37	4,082 4,297 4,378 4,064 4,364	+8,9253 8,9800 9,0047 8,9254 9,0037	-8,8127 ,8669 ,8862 ,8028 ,8785	+0,0109 ,6332 ,0413 ,6079 ,6389	-8,81704 ,9008 ,9316 ,8147 ,9324

	Declination,	Annual		Logarii	lims of		Differ	ence from the		
No.	(South.) Jap. 1. 1840.	Precession	a'	b'	ε′	ď'	No.	M.C.	m T.	Declin.
3241 3242 3243 3244 3244	51 53 10,51 54 21 14,30 43 37 49,16 43 37 50 33 26,27	+13,492 13,496 13,518 13,595 13,698	9,4969 ,5403 ,2900 ,2856 ,6117	-9,7239 ,7381 ,6677 ,6701 ,7702	+1,1301 ,1302 ,1309 ,1334 ,1366	4-9,2689 ,8688 ,8682 ,8661 ,8633	6949 6950 6953 6954 6960	$ \begin{array}{c} -3.21 \\ -1.81 \\ -0.91 \\ +1.11 \end{array} $	- 1;74	$\begin{array}{c} + & 1,72 \\ - & 3,60 \\ - & 4,77 \\ + & 9,48 \end{array}$
3246 3247 3248 3249 3200	39 8 44,14 55 21 15,92 60 37 27,05 54 30 58,74 49 34 29,69	13,698 13,783 13,867 13,951 13,997	-9,0934 ,5441 ,6191 ,5276 ,4210	-9,6348 ,7525 ,7802 ,7552 ,7255	+1,1966 ,1393 ,1420 ,1446 ,1460	+ 9,8633 ,8609 ,8585 ,8561 ,8547	6961 6964 6965 6971 6073	$\begin{array}{c} -2.66 \\ -2.86 \\ -2.15 \\ -0.49 \end{array}$	— 2,06 — 3,87	- 4,66 - 5,30 + 3,87 - 3,71 - 5,82
3251 3252 3253 3254 3255	32 58 30,92 46 0 56,68 60 2 57,65 65 12 58,17 67 9 41,70	13,993 14,001 14,068 14,109 14,167	8,3979 9,3304 9,6021 9,5250 9,5539	-9,5795 ,7012 ,7840 ,7620 ,7736	+1,1459 ,1462 ,1482 ,1495 ,1513	+9,8548 ,8546 ,8526 ,8514 ,8496	6975 6974 6978 6980 6981	- 4,18 - 1,06 - 3,96 - 0,49	$+14,72 \\ -2,76 \\ -2,77$	+ 5,91 + 2,45 + 0,10 - 5,61 - 6,33
8256 3257 3258 3259 3260	44 1 28,01 40 54 32,00 58 17 10,09 59 34 52,23 53 56 7,27	14,167 14,306 14,416 14,440 14,453	9,2528 ,1139 ,5599 ,6775 ,4829	9,6911 ,6695 ,7866 ,7938 ,7654	-+1,1513 ,1555 ,1588 ,1596 ,1699	+9,8496 ,8453 ,8418 ,8410 ,8406	6982 6986 6989 6900 6992	- 2,28 - 2,38 - 2,51 +59,90 - 2,74	— 0,28 — 4,65 — 2,54	+ 6,89 - 2,19 + 1,76 + 3,78 + 2,08*
3261 3262 3263 3264 3264	60 20 40 9 49 22 38,58 54 6 49,64 47 43 9,31	14,473 14,489 14,613 14,701 14,709	-9,5866 ,0531 ,3729 ,4728 ,3222	-9,7975 ,6685 ,7429 ,7789 ,7347	+1,1605 ,1610 ,1647 ,1673 ,1676	+9,8399 ,8394 ,8353 ,8323 ,8320	6993 6995 6999 7003 7004	— 0,11 — 1,66 — 2,53	+ 0,03	- 3,67 - 1,65 - 3,14
3266 3267 3268 3269 3270	57 56 0,69 47 17 38,18 46 44 61,50 38 30 51,69 53 59 26,41	14,067 16,010 15,144 15,163 15,201	9,5237 9,2856 9,2553 8,8261 9,4133	9,8012 ,7405 ,7406 ,6730 ,7821	+1,1751 ,1764 ,1802 ,1808 ,1819	+9,8228 ,8213 ,8162 ,8165 ,8140	7013 7015 7019 7020 7022	-0.62 $-0.93$	——————————————————————————————————————	+ 4,69 + 3,88 + 0,65 + 2,56 - 0,07
3271 3272 3273 3273 3274 3276	60 6 8,82 57 34 60 23 57,02	15,239 15,326 15,330 15,427 15,684	-9,4893 ,5340 ,4928 ,5327 ,3365	-9,7910 ,8214 ,8100 ,8255 ,7872	+1,1830 ,1854 ,1855 ,1883 ,1955	+9,8125 ,8091 ,8090 ,8050 ,7941	7024 7027 7028 7031 7045	$-\frac{0,10}{2,06}$	+ 0,22	$ \begin{array}{c c}  & 3,91 \\  & 0,61 \\  & 2,71 \\  & 5,62 \end{array} $
8276 8277 8278 3278 3280	58 9 20,69 58 0 52 17 19,58	15,688 15,839 15,839 15,858 15,864	-9,3502 ,4639 ,4609 ,3385 ,4594	-9,7907 ,8269 ,8261 ,7963 ,8267	+1,1956 ,1997 ,1997 ,2001 ,2004	+9,7940 ,7872 ,7872 ,7866 ,7861	70,46 7049 7060 7061 7052	$-\frac{3,32}{2,72}$		$ \begin{array}{c c} - 6,92 \\ - 0,02 \\ - 1,06 \\ + 3,403 \end{array} $
3281 3282 3283 3283 3285	56 27 23,87 58 20 6,27 50 49 1,83	15,875 15,960 16,002	-9,3096 ,4298 ,4564 ,2856 ,4456	+9,7902 ,8196 ,8310 ,7915 ,8319	1 2042	7796	7053 7064 7086 7086 708	$\begin{vmatrix} -2,02 \\ -1,19 \\ -1,44 \end{vmatrix}$		97

٦ -			No.	Right Ascen.	Annual		Logarit	hms of	
No.	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	. а	b	С	d
3286 3287 3288 3289 3290	Indi 	7 7 8.9 6.7 7.8	3 3 2 2 2 2	H. M. 8. 21 32 34,11 32 36,75 32 49,79 32 48,44 32 47,07	+4,350 4,347 4,241 3,845 4,217	+9,0037 9,0032 8,9775 8,8723 8,9714	8,8774 ,8766 ,8501 ,7452 ,8441	+0,6385 ,6382 ,6275 ,5849 ,6146	-8,0323 ,9315 ,8948 ,7156 ,8859
3291 3292 3293 3294 3294 3295	Indi Gruis Indi Gruis	7.8 7 6.7 6	2 3 3 3 3	33 3,85 35 49,18 37 40,57 37 49,91 38 9,31	4,258 3,940 4,309 3,929 3,942	+8,9826 8,9082 9,0102 8,9093 8,9138	-8,854I ,7670 ,8634 ,7620 ,7052	+0,6292 ,5955 ,6344 ,5943 ,5957	8,9020 ,7800 ,9385 ,7803 ,7882
3296 3297 3298 3299 3300	Gruis Indi	7.8 7.8 8.7	3 3 3 3	39 25,97 39 38,12 40 53,58 41 58,85 44 57,36	3,901 3,933 4,169 3,978 4,284	+8,9059 8,0155 8,9843 8,9349 9,0277	-8,7522 ,7610 ,8246 ,7710 ,8515	+0,5912 ,5947 ,6200 ,5996 ,6318	8,7723 ,7896 ,8996 ,8211 ,9590
3301 3302 3303 3304 3305		7.8 6.7 8.9 7.8 6.7	3 3 3 2 3	45 21,10 47 8,71 47 21,93 47 38,86 49 26,78	4,056 4,321 3,648 3,647 4,159	+8,9072 9,0445 8,8534 8,8539 9,0091	-8,7893 ,8595 ,0673 ,6667 ,8142	+0,6081 ,6356 ,5620 ,5619 ,6181	
3306 3307 3308 3309 3310	Indi K°	7 5,6 7 6.7	3 3 3 4	50 56,11 51 3,76 52 46,14 54 33,40 55 47,27	4,041 4,181 4,139 4,289 4,253	+8,9803 9,0201 9,0141 9,0618 9,0566	-8,7794 ,8189 ,8067 ,8454 ,8348	+0,6065 ,6213 ,6169 ,6324 ,6287	-8,8872 8,9466 8,9364 9,0010 8,9916
3311 3312 3313 3314 3815	Piscis Aust.	7.8 8 6 8 6.7	3 5 3 3	56 32,36 57 34,39 59 3,38 22 0 3,72 0 52,31	4,256 4,245 3,533 4,063 3,436	+9,0599 9,0605 8,8466 9,0166 8,8211	-8,8349 ,8313 ,6095 ,7702 ,5775	+0,6290 ,6279 ,6481 ,6088 ,5360	8,9977 ,9982 ,6028 ,9362 ,5073
3316 3317 3318 3319 3320	Piscis Aust.	7.8 7 7 6.7 7.8	3 3 3 3 3	2 12,66 2 22,48 3 33,44 4 44,63 4 55,26	4,066 3,415 3,411 3,382 3,934	+9,0248 8,8179 8,8190 8,8129 8,9922	-8,7751 ,5682 ,5036 ,5522 ,7306	+0,6092 ,5334 ,5329 ,5292 ,5948	8,9470 ,4883 ,4884 ,4540 ,8972
3321 3322 3623 3524 3325		7 7.8 6.7 6 6.7	3 3 3 3	6 45,28 12 5,14 12 55,64 13 16,58 14 15,76	3,973 3,996 3,705 3,703 4,039	+9,0112 9,0374 8,9389 8,9390 9,0589	-8,7411 ,7426 ,6404 ,6390 ,7541	+0,5991 ,6016 ,5688 ,5685 ,6063	8,9250 ,9606 ,8010 ,8010 ,9900
3326 3328 3329 3330	Gride Tucania Pricis Aust	8 7.8 8.9 6.7	3 3 3 2 4	16 46,53 17 23,21 18 20,84 18 49,37 22 40,33	4,025 3,759 4,059 3,544 3,599	+9,0640 8,9722 9,0812 8,8953 8,9272	8,7470 ,6524 ,7565 ,5685	+0,6048 ,5751 ,6084 ,5495	-8,9961 8,8573 9,0188 8,7021 8,7693

ţ		Declination.	· · ·		Lament	thms of	<u>,</u>	Differ		ie Brisbane	Catalogue.
1	No.	(South.) Jan, 1. 1840.	Annual Precession		b'	c'	$\frac{d'}{d'}$	No.		scension om   T.	Declin.
	3286 3287 3288 3289 3290	58 2 50,92 58 0 21,13 55 46 51,90 44 12 59,13 55 13 33,84	16,051 16,055 16,065 16,061 16,065	9,4440 ,4426 ,3979 ,0253 ,3856	9,8322 ,8320 ,8212 ,7472 ,8184	+1,2055 ,2056 ,2059 ,2058 ,2059	+9,7773 ,7771 ,7766 ,7768 ,7766	7064 7065 7066 7068 7067	**************************************	1,88 - 1,93 - 2,96	+ 3,50 + 3,07 - 6,59 + 8,28 - 4,72
	3291 3292 3293 3294 3295	56 11 55,22 48 8 3,85 57 0 38,61 48 1 35,06 48 30 43,03	16,079 16,244 16,316 16,323 16,339	-9,4048 ,1643 ,4183 ,1492 ,1643	-9,8237 ,7806 ,8390 ,7819 ,7856	+1,2062 ,2107 ,2126 ,2128 ,2132	+9,7759 ,7676 ,7639 ,7636 ,7627	7069 7076 7079 7080 7081	$\begin{array}{r} -0.41 \\ +28.55 \\ -2.91 \\ -1.85 \\ -1.77 \end{array}$	3,42 1,77.	-10,61 + 6,63 + 3,06 - 2,15 + 6,34
The same of the sa	3296 3297 3298 3299 3300	47 20 57,26 48 27 52,36 55 23 41,79 50 19 59,55 58 39 6,53	16,403 16,414 16,477 16,530 16,676	9.1072 ,1492 ,3444 ,1987 ,3927	-9,7795 ,7874 ,8302 ,8025 ,8516	+1,2149 ,2152 ,2169 ,2183 ,2221	+9,7593 ,7588 ,7553 ,7524 ,7440	7083 7084 7087 7090 7095	$\begin{array}{r} -1,31 \\ -1,83 \\ -0,61 \\ -1,64 \\ -2,88 \end{array}$	- 1,35 + 0,18	- 1,48 + 6,78 - 0,96 - 5,98 + 2,12
	3301 3303 3304 3305	53 12 51,71 59 46 15,23 38 30 8,21 38 30 50,01 56 38 38,30	16,696 16,779 16,792 16,805 16,893	-9,2624 -9,4031 +7,0000 +7,0000 -9,3222	9,8242 ,8593 ,7172 ,7177 ,8475	+1,2226 ,2248 ,2251 ,2254 ,2277	+9,7428 ,7378 ,7371 ,7363 ,7308	7097 7101 7103 7104 7106	$ \begin{array}{r} -3,43 \\ -0,38 \\ -2,53 \end{array} $	$ \begin{array}{r} -3,78 \\ -3,42 \\ +0,98 \\ -1,01 \end{array} $	$\begin{array}{c} -0.01 \\ +2.88 \\ +8.03 \\ +10.68 \\ +1.21 \end{array}$
	3306 3307 3308 3309 3310	53 50 4,07 57 26 13,84 56 44 25,51 60 24 22,65 59 54 18,43	16,959 16,962 17,047 17,127 17,185	—9,2405 —9,3324 —9,3053 —9,8747 —9,8500	—9,8344 ,8531 ,8519 ,8710 ,8702	+1,2294 ,2295 ,2316 ,2337 ,2351	+9,7266 ,7264 ,7212 ,7154 ,7114	7111 7110 7114 7117 7121	- 2,64 - 9,40 - 3,22 - 2,88 - 2,50	- 4,06 10,95 1,78 4,31	$\begin{array}{r} + 3,62 \\ -41,96 \\ + 0,89 \\ - 3,13 \\ +16,90 \end{array}$
	3311. 3312 3313 3314 3314 3315	60 5 31,82 60 3 49,61 34 49 17,40 56 13 58,90 29 4 29,01	17,218 17,262 17,341 17,374 17,405	-9,3541 -9,3483 +8,8451 -9,2380 +9,1399	-9,8719 ,8728 ,6934 ,8576 ,6250	+1,2360 ,2371 ,2391 ,2399 ,2407	+9,7091 ,7059 ,7001 ,6976 ,6952	7125 7127 7132 7133 7136	$ \begin{array}{r} -1,55 \\ -2,24 \\ -1,70 \\ -1,50 \end{array} $	Ang Pagawan Ang Pa	- 2,50 + 0,02 -1,20,03 + 3,73 + 7,87
;	3316 3317 3318 3319 3320	56 43 48,14 27 56 4,22 27 52 11,55 25 58 13,51 53 29 27,27	17,460 17,466 17,520 17,570 17,579	9,2355 +9,1875 +9,1959 +9,2563 9,1072	—9,8625 ,6107 ,6111 ,5839 ,8481	4-1,2422 ,2422 ,2435 ,2448 ,2450	+9,6905 ,6905 ,6862 ,6821 ,6814	7139 7140 7141 7142 7143	$ \begin{array}{r} -2,26 \\ -6,61 \\ -2,85 \\ -2,72 \end{array} $	- 3,13	$ \begin{array}{r} -2,47 \\ +4,72 \\ +4,76 \\ -3,07 \end{array} $
	3321 3322 3323 3324 3324	55 6 54,89 56 57 16,33 46 45 3,26 46 43 47,11 58 35 17,79	17,657 17,873 17,904 17,917 17,956	-9,1430 -9,1523 -8,4624 -8,4472 -9,1847	—9,8588 ,8735 ,8131 ,8133 ,8834	+1,2469 ,2522 ,2529 ,2533 ,2542	+ 9,6749 ,6556 ,6525 ,6513 ,6475	7147 7156 7158 7159 7161	- 2,63 - 0,70 - 0,75 - 0,72 - 2,11	- 1,09 - 1,38 - 4,01	- 3,51 + 1,05 - 7,31 + 2,75 - 1,96
	3326 3327 8828 8329 5330	58 48 38,42 50 9 47,87 60 2 41,40 39 54 10,14 44 4 56,04	18,053 18,076 18,114 18,129 18,270	9,1643 8,7243 9,1875 +8,7781 +8,4150	-9,8867 ,8403 ,8937 ,7633 ,8020	+1,2566 ,2571 ,2580 ,2584 ,2617	6138	7165 7166 7168 7169 7177	$\begin{bmatrix} -1,35 \\ -2,39 \end{bmatrix}$	984 <b>3</b> 34	+ 3,83   0,67   3,35   8,71   0,0

No.	Names.	Mag.	No.	Right Ascen.	Annual		Logarit	hms of	
140	rantes.	mag.	Obs.	Jan. 1, 1840.	Precesn.	а	b	c	$\overline{d}$
3831 3332 8383 3334 3535	Tucanæ Gruis Tucanæ Gruis	7.8 8 7 7 7	သက္ကက္ကက	11, M. S. 22 23 9,61 24 10,61 25 28,87 25 38,00 26 55,77	s + 3,978 3,843 3,945 3,761 3,676	+9,0726 9,0275 9,0708 0,0008 8,9718	8,7239 ,6737 ,7097 ,6395 ,6030	-1-0,5997 ,5847 ,5960 ,5758 ,5658	9,0057 8,9414 9,0019 8,8997 8,8497
3336 3837 3838 3839 3340	Gruis Tucanæ Piscis. Aust.	6.7 7.8 7.8 7	ଝରଚଛଚ	29 12,72 30 22,60 30 84,80 30 49,23 30 51,64	3,763 3,682 3,886 3,360 3,360	+9,0147 8,9856 9,0688 8,8491 8,8492	-8,6348 ,5993 ,6814 ,4606 ,4603	-+0,5755 ,5661 ,5985 ,5250 ,5250	-8,9199 ,8724 ,9983 ,5365 ,5368
3341 3342 3343 3344 8345	Gruis	0.7 7 5.6 6.7 7.8	33353	33 2,16 33 17,22 35 46,57 36 12,44 36 29,32	3,615 3,562 3,735 3,685 3,630	+8,9667 8,9433 9,0285 8,9636 8,9840	8,5650 ,5412 ,0127 ,5451 ,5646	+0,5581 ,5517 ,5728 ,5545 ,5599	8,8377 ,7932 ,9884 ,8303 ,8674
3346 3347 3348 3349 3360	Gruis Tucance	7 6.7 7 7.8 6.7	3 3 2 3	30 49,52 37 13,84 38 40,59 41 37,02 44 8,20	3,641 3,586 3,443 3,863 3,573	+8,9912 8,9675 8,9058 9,1086 8,9866	-8,5689 ,6433 ,4732 ,6581 ,5211	+0,5612 ,5546 ,5369 ,5869 ,5530	8,8785 8,8369 8,7050 9,0491 8,8671
3351 3352 8353 8354 3355		7 7 7.8 7 6.7	2 3 3 3 3	45 55,58 45 56,11 46 26,00 49 39,93 50 50,19	3,559 3,560 3,561 3,364 3,298	+8,9867 8,9868 8,9890 8,8973 8,8678	-8,5099 ,5101 ,5093 ,3964 ,3590	+0,5513 ,5514 ,5510 ,5269 ,5182	-8,8664 ,8667 ,8703 ,6701 ,5707
8356 8357 8358 8359 3360	Gruis Tucanco	7.8 7.8 6 7.8	3033	51 11,21 51 35,44 51 41,51 64 23,59 54	3,564	+9,0958 8,9943 9,0180 9,0645 8,8959	-8,5839 ,4805 ,4988 ,5319 ,3614	+0,5719 ; ,5478 ,5619 ,5607 ,5232	-9,0301 8,877 <b>0</b> 8,9083 8,9857 8,6007
8361 8362 8363 8364 8365		7 7 7.8 0.7 6.7	32333	54 58,14 57 54,29 57 58,37 23 1 8,37 1 5,66	3,499 3,512 3,891	+8,9374 9,0039 9,0140 8,9504 8,8674	-8,4006 ,4459 ,4550 ,3682 ,2853	+0,5324 ,5489 ,5455 ,6303 ,6125	-8,7656 ,8910 ,9076 ,7898 ,5521
8866 8867 8868 3369 3370	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	6.7 5 8 7.8 7.8	3 3 3 3 3	1 15,03 1 10,37 1 20,61 3 37,09 4 6,81	3,366 3,418 3,389 3,532 3,457	4-8,9347 8,9685 8,9498 9,0529 -9,0072	8,3515 ,3848 ,3656 ,4507 ,4007	+0,5271 ,5338 ,5301 ,5480 ,5887	-8,7554 ,8200 ,7884 ,9666 ,8944
8371 8372 3378 3374 3375	Tucana Gruis Tucanæ	7.8 6.7 6.7 7	3323 1	4 39,05 6 0,74 6 5,17 7 0,96	3,656 3,346	+ 8,9387 9,0820 8,9405 9,0689 9,1016	8,3279 ,4602 ,3180 ,4380 ,4696	+0,5253 ,5510 ,5245 ,5472 ,5538	8,7624 9,0082 8,7656 8,9894 9,0861

	Declination.	,		Logarith	ma of	r	Differ		e Brisbane	Catalogue.
No.	(Sauch)	Annual Procession	a'		c'		No.		scension om T.	Declin.
3331 3332 3333 3334 3335	59 2 3,37 55 7 13,27 58 42 23,78 52 25 30,47 49 7 49,50	+ 18,290 18,325 18,372 18,376 18,423	-9,1038 8,9243 9,0607 8,7076 8,1461	-9,8934 ,8750 ,8938 ,8612 ,8419	+1,2622 ,2630 ,2641 ,2643 ,2653	,6073 ,6016 ,6010	7178 7179 7180 7181 7182	s. - 0,40 - 2,49 - 2,39 - 1,53 + 0,54	- 1,14 - 2,81	+ 6,59 - 3,43 + 4,65 + 1,77 + 0,84
3336 3337 3338 3339 3340	53 31 11,63 50 25 36,25 58 15 9,42 20 9 15,30 29 10 34,36	18,497 18,538 18,544 18,551 18,553	-8,7076 -8,2041 -8,9731 +9,2900 +9,2900	9,8704 ,8529 ,8958 ,6538 ,6541	+1,2671 ,2681 ,2682 ,2684 ,2684	+9,5853 ,5798 ,5788 ,5779 ,5776	7187 7188 7189 7190 7191		$ \begin{array}{r} -3,07 \\ -0,83 \\ -0,60 \\ -0,81 \end{array} $	+ 3,57 - 8,07 + 3,99 - 2,74
3341 3342 3343 3344 3345	48 1 44,86 45 5 0,42 54 20 21,97 47 23 5,48 40 48 57,81	18,629 18,632 18,710 18,725 18,733	+8,2041 +8,6628 +8,5798 +8,5051 +7,9542	-9,8393 ,8183 ,8800 ,8372 ,8535	+1,2702 ,2702 ,2721 ,2724 ,2726	+9,5666 ,5663 ,5543 ,5520 ,5507	7195 7196 7203 7204 7205	+10,41 - 2,38 - 2,37 - 3,03	- 2,93 - 2,12 - 2,56 - 3,56	+ 5,41 + 4,55 - 1,50 + 3,68 + 3,12
3346 3347 3348 3349 3350	50 30 49,38 47 46 44,75 39 3 35,86 60 43 37,95 49 26 34,80	18,745 18,756 18,800 18,890 18,961	+7,4771 +8,4914 +9,0755 -8,8976 +8,5563	-9,8583 ,8406 ,7714 ,9148 ,8564	+1,2729 ,2731 ,2742 ,2762 ,2778	+9,5487 ,5470 ,5896 ,5238 ,5104	7207 7208 7211 7213 7219	$ \begin{vmatrix} -4,23 \\ -2,53 \\ +0,33 \end{vmatrix} $	$-\frac{1,06}{3,04}$	-14,42 + 1,45 + 2,65 + 1,94 - 4,81
3351 3359 3353 3364 3355	49 19 3,89 49 20 38,89 49 33 23,03 36 22 20,56 30 19 9,26	19,011 19,011 19,024 19,112 19,143	+8,6335 +8,6335 +8,6335 +9,2355 +9,3560	-9,8568 ,8569 ,8586 ,7522 ,6830	,2813	,5003 ,4977 ,4786	7221 7222 7226	$ \begin{array}{c c} -0.48 \\ -2.00 \\ -1.26 \end{array} $		+ 1,34
3350 3367 3358 3359 3360		19,166 19,162 19,164 19,231 19,237	8,4941 +8,7482 +8,5798 +7,6021 +9,2787	,8633 ,8758 ,9033	,2824 ,2826 ,2840	4668 4668 4498	3   7230 3   723 5   728 <sub>2</sub>	$0 \mid -0.87$ $1 \mid -2.11$ $1 \mid -5.96$		$ \begin{array}{r} -4,74 \\ +1,92 \\ +5,37 \end{array} $
3301 3302 3363 3864 3864	50 28 13,15 51 32 53,78 43 43 29,67	19,245 19,315 19,319 19,388 19,388	8,8451 8,4314 0,1430	,871 ,877 ,825	7 , $286$	4260 0 ,425 5 ,403	724 724 724	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3 - 2,90	$ \begin{array}{c c}  & -0.02 \\  & +7.21 \\  & +4.63 \end{array} $
3360 3368 3368 3368 3370	46 6 40,73 3 43 37 8,35 0 55 3 20,14	19,392 19,394 19,443	9,0756 9,146 8,690	,843 ,824 ,900	$\begin{bmatrix} 2 & ,287 \\ 3 & ,287 \\ 6 & ,288 \end{bmatrix}$	6 ,402 7 ,401 8 ,384	0   725 5   725 7   725	$\begin{vmatrix} 2 & -1,10 \\ 3 & -1,10 \\ 65 & -2,50 \end{vmatrix}$	$\begin{bmatrix} -2,85 \\ -2 \\ -7 \\ -1,9 \end{bmatrix}$	3 + 2,7 + 9,9 + 2,0,6 7 + 2,6
337 337 337 337 337	2 57 33 35,3° 3 41 58 18,4° 4 58 <b>2</b> 3 52,9°	7 19,495 8 19,49	8,668 4 9,225 0 8,699	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1 ,289 1 ,289 39 ,290	99 ,366 99 ,366 93 ,35	51   726 55   726 75   726	$\begin{bmatrix} 51 \\ -2,0 \\ 64 \\ -1,7 \\ -55 \end{bmatrix}$		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

	- The state of the		No.	Right Ascen.	Annual	·	Logarit	hms of	
No.	Names.	Mag.	Obs.	Jan. 1, 1840.	Precesa.	a .	8	c	d
3376 3377 3378 3379 3380	γ Tucanæ φ Gruis γ App. Sculp.	5.6 8 6.7 7.8 5.6	6 3 3 3	11. M. S. 23 8 3,19 9 11,18 9 19,23 9 47,75 10 10,46	* 3,567 3,567 3,327 3,396 3,257	+9,1020 9,1033 8,9400 8,9902 8,8920	-8,4625 ,4538 ,2893 ,3396 ,2341	-+ 0,5523 ,5511 ,5220 ,5308 ,6128	9,0354 9,0371 8,7627 8,8632 8,6325
3381 3382 3383 3384 338 <i>5</i>	Gruis Tucanco Gruis	7.8 6.7 7 7 7.8	3 2 2 3 3	11 4,77 11 48,96 14 14,48 14 33,08 14 48,12	3,385 3,412 3,465 3,307 3,436	+8,9918 9,0169 9,0722 8,9474 9,0533	8,3260 ,3437 ,3762 ,2481 ,3519	+0,5295 ,5330 ,5397 ,5194 ,5369	8,8654 8,9083 8,9928 8,7767 8,9651
3386 3387 3388 3389 3390	Gruis App, Sculp, Tucance Gruis	7 6.7 7.8 5.6 6	3 3 2 3	14 57,79 16 13,47 15 46,95 16 9,48 17 37,56	3,318 3,407 3,268 3,466 3,399	+8,9585 9,0335 8,9196 9,0883 9,0430	8,2562 ,3275 ,2083 ,3701 ,3124	+0,5209 ,5324 ,6143 ,5397 ,6314	8,8001 8,9343 8,7094 9,0153 8,9486
3391 3392 3393 3394 3395	Tucanæ Gruis ————————————————————————————————————	6.7 8 6.7 7.8 6.7	3 3 4 4 3	18 4,80 18 16,02 18 15,28 19 67,98 20 16,34	3,475 3,366 3,365 3,362 3,300	+9,1091 9,0191 9,0180 9,0200 8,9706	-8,3735 ,2814 ,3803 ,2751 ,2110	+0,5409 ,5271 ,5271 ,5266 ,5185	-9,0437 8,0105 8,0086 8,9117 8,8227
3396 3397 3398 3399 3400	Gruis Phonicis Gruis 8 App. Sculp.	7.8 7 6.7 7 5.6	3 3 3 3 3	20 19,10 21 55,25 22 44,14 23 12,90 24 22,74	3,399 3,271 3,288 3,263 3,232	+9,0627 8,9522 8,9741 8,9514 8,9262	-8,3030 ,1742 ,1859 ,1576 ,1185	-+0,5314 ,5147 ,5169 ,5136 ,5095	8,0779 8,7841 8,8288 8,7819 8,7219
3401 3402 3403 3404 3406	Phoenicis	7.8 7 8 7.8 6	3 3 3 3	26 9,42 26 12,94 27 14,70 29 13,94 29 13,20	3,376 3,253 3,225 3,256 3,254	-1-9,0912 8,9589 8,9340 8,9817 8,9810	-8,2605 ,1278 ,0891 ,1098 ,1091	+0,5284 ·,6123 ,5086 ,5125 ,5124	9,0181 8,7970 8,7402 8,8418 8,8404
3406 3407 3408 3409 3410	Phonicis  01  08	7.8 6.7 7		29 29,49 30 18,86 30 51,23 30 32 14,00	3,230 3,248 3,262 3,251 3,172	8,9822 8,9908 8,9908	-8,0751 8,0938 8,0943 8,0943 7,9786	+0,5092 ,5116 ,5121 ,5120 ,5013	-8,7800 ,842 <i>t</i> ,858 ,857 <i>t</i> ,632;
3411 3412 3414 3414 3414	App. Sculp. Phonicis Gruis	7.8 7.8 7.8 7.8	3 3 3	35 22,42 37 34,04	3,211 3,217 3,180	8,9570 8,9822 8,9443	7,9318	+0,5011 ,5066 ,5074 ,5024 ,5079	,841
341 341 341 341 342	6 8 App. Soulp. 7 Phoenicis 8 ————————————————————————————————————	5.6 7.8 7.8 7.8	3 3	42 5,63 42 10,30 43 4,18	3,202 3,183 3,157	9,0388 8,9991 8,9560	7,9267 7,8853 7,8202	+0,4955 ,5054 ,5028 ,4903 ,4964	,938 ,871 ,786

	Declination.	Annual		Logarit	hms of	1 1 2 4		ence from th Right As	cension	
No.	(South.) Jan. 1. 1840.	Precession	a <sup>n</sup>	<i>b'</i>	c'	$d^{n}$	No.	from M.C.	m .T.	Declin.
3876 8377 3378 3379 5380	59 6 38,57 59 10 18,02 41 41 28,45 48 18 27,55 33 24 5,48	+ 19,534 19,556 19,558 19,658 19,658	+8,4914 8,6441 9,2528 9,1004 9,3874	9,9223 9231 ,8121 ,8624 ,7803	+1,2908 ,2913 ,2913 ,2913 ,2917	+9,3493 ,3899 ,3887 ,3387 ,3319	7287 7270 7271 7273 7274	+ 0,09	2,30 - 1,48 + 0,19 - 3,01	+ 8,95 - 2,14 - 0,13 + 1,43 + 3,78
3381 3382 3383 3384 3384	48 24 48,73 51 10 39,63 56 25 45,42 42 28 41,12 54 41 28,67	19,590 19,604 19,647 19,852 19,856	+9,1139 9,0414 8,8808 9,2742 8,9638	9,8638 ,8818 ,9120 ,8208 ,9032	+1,2920 ,2923 ,2933 ,2934 ,2935	+9,3244 ,3 73 ,2 63 ,2 21 ,2 96	7275 7276 7278 7279 7280	-1,85 $-4,17$ $-2,65$	3,34 - 2,69 - 2,42	+ 9,69 + 4,08 + 2,35 + 2,74 - 9,67
3386 3387 3388 3389 3390	44 0 3,04 52 46 58,87 38 4 37,68 57 43 29,97 53 36 20,00	19,659 19,664 19,673 19,684 19,704	9,2480 9,0374 9,8502 8,8633 9,0463	9,8533 ,8926 ,7818 ,9192 ,8983	+1,2936 ,2937 ,2939 ,2941 ,2945	+9,2883 ,2868 ,2806 ,2740 ,2620	7282 7283 7284 7285 7287	— 1,86 ———	$-\frac{4,42}{2,78}$ $-\frac{2,78}{2,82}$	+ 7,65 + 4,64 - 4,12 + 10,27 + 2,80
3391 3392 3393 3394 3395	51 2 11,90 51 13 22,57	19,711 19,714 19,714 19,725 19,745	+8,8195 9,1206 9,1206 9,1271 9,2624	9,9273 8842 ,8834 ,8848 ,8456	#1,2947 2948 2948 2948 ,9950 ,2954	+9,2572 ,2551 ,2661 ,2482 ,2339	7289 7290 7291 7292 7294	- 2,19 - 2,69 - 0,96 - 1,16 - 1,13	2,78 1,80 - 4,32	+ 4,87 + 4,00 - 2,27 + 2,60 + 0,96
3396 3397 3398 3399 3400	42 61 57,18 45 43 30,61 42 38 2,13	19,745 19,768 19,781 19,787 19,803	+9,0253 9,3160 9,3075 9,3203 9,3856	9,9087 ,8269 ,8490 ,8249 ,7906	+1,2954 ,2960 ,2962 ,2964 ,2967	+9,2339 ,2161 ,2061 ,2007 ,1871	7296 7296 7297 7298 7300	-2,84 $-2,01$ $-1,79$	- 2,91 - 3,16 - 3,26 - 2,40	+ 0,24 + 0,13 + 2,62 + 4,29 + 3,65
3401 3402 3403 3404 3405	48 34 1,91 39 50 16,73 46 27 9,72	19,826 19,827 19,840 19,863 19,863	+9,0374 9,8324 9,3850 9,3075 9,8096	992 <b>9</b> 2 8384 8019 8662 8666	-+1,2972 ,2972 , <del>2</del> 976 ,2980 ,2980	+9,1646 ,1687 ,1507 ,1242 ,1242	7302 7303 7305 7308 7309	$-\frac{2,92}{8,11}$	$ \begin{array}{r} -3,28 \\ -3,42 \\ -2,60 \\ -3,24 \end{array} $	+ 5,04 - 1,82 -10,73 + 4,22 + 7,81
3406 3407 3408 3409 3410	46 29 46,41 47 31 28,49 47 31	19,864 19,876 19,881 19,881 19,897	+9,3655 9,3160 9,3010 9,3032 9,4757	-9,8250 ,8567 ,8642 ,8642 ,7322	+1,2981 ,2983 ,2984 ,2984 ,2988	+9,1198 ,1079 ,1000 ,1001 ,0786	7310 7313 7314 7315 7316	1,12	$ \begin{array}{r} -3,18 \\ -3,06 \\ -2,92 \\ -2,85 \end{array} $	+ 4,43 + 3,28 + 3,48
3411 3412 3413 3414 3416	43 9 10,30 46 20 47,90 41 4 8,56	19,902 19,909 19,927 19,947 19,957	+9,4771 9,3784 9,3483 9,4216 9,3075	—9,7323 ,8320 ,8668 ,8152 ,8892	+1,2989 ,2990 ,2994 ,2999 ,3001	8,9855	7317 7318 7322 7324 7326	-1.65 $-2.24$	- 3,89 - 1,43 - 2,83	- 0,29
3416 3417 3418 3418 3418	52 35 23,12 48 16 0,10 42 39 40,95	19,970 19,982 19,982 19,988 19,990	+9,5315 9,3075 9,3655 9,4314 9,4941	—9,6838 ,8986 ,8714 ,8296 ,7634	,3006	,8865 ,8849 ,8630	7830 7332 7333 7336 7337	$\begin{bmatrix} -0.68 \\ -1.94 \end{bmatrix}$	$ \begin{array}{r} -3,66 \\ -3,22 \\ -3,97 \\ -2,11 \end{array} $	+ 8,68 - 0,11 + 3,61 + 3,12

No.	Names.	B/T	No.	Right Ascen.	Annual		Logari	thms of	
.140.	rames.	Mag.	Obs.	Jan. 1, 1840.	Precesn.	a	b .	°	d
3421 3422 3423 3424 3425	Phænicis App. Sculp.	7.8 7.8 7.8 7 6.7	3 3 3 3 3	H. M. S. 23 44 42,04 45 0,01 46 5,13 46 14,49 46 59,83	8, + 3,194 - 3,170 - 3,110 - 3,136 - 3,116	+9,0669 9,0131 8,8768 8,9465 8,8987	7,8854 ,8238 ,6549 ,7188 ,6461	+0,5043 ,5011 ,4927 ,4964 ,4936	-8,9815 ,8961 ,5470 ,7649 ,6321
3426 34274 3428 3429 3430	App. Soulp. Phæniois Tuoanæ Phæniois	7 7.8 -6 7.8	အ အ ၂ သ အ	46 59,81 47 2,67 47 48 20,65 48 23,29	3,116 3,159 3,147 3,176 3,130	+8,8984 9,0242 9,0033 9,1010 8,9596	-7,6459 ,7694 ,7251 ,8006 ,6592	+0,4936 ,4995 ,4979 ,5019	8,6316 8,9146 8,8788 9,0301 8,7938
3431 3432 3433 3434 3436	Phonicis Tucanos Phonicis App. Sculp. Phonicis	8 7 6.7	88888	49 56,65 50 11,50 50 37,16 51 14,25 51 29,68	3,157 3,157 3,140 3,097 3,129	+9,0246 9,0999 9,0504 8,8876 9,0330	-7,6589 ,7223 ,6110 ,4588 ,5903	+0,4993 ,4993 ,4969 ,4909 ,4954	9,0151 9,0286 8,9562 8,5911 8,9287
3436 3437 3438 3439 3440	Phœnicis App. Sculp. Phœnicis	8 7.8 7.8 6 7	3 7 3 3 3	51 52,07 51 58,40 52 38,42 52 50,07 53 5,46	3,126 3,107 3,119 3,115 3,115	+9,0317 8,9462 9,0278 9,0126 9,0267	-7,5712 ,4783 ,5211 ,4935 ,4862	+0,4950 ,4923 ,4940 ,4935 ,4935	-8,9267 8,7636 8,9202 8,8948 8,9185
3441 3442 3443 3444 3446	App. Soulp.	7 7.8 6 9 8.9	3 3 4 4	53 27,94 53 42,76 54 7,59 54 30,58 55 39,50	3,100 3,095 3,087 3,118 3,112	+ 8,9461, 8,9278 8,8888 9,1057 9,1080	-7,3876 ,3507 ,2821 ,4671 ,4106	+0,4914 ,4907 ,4896 ,4939 ,4930	8,7632 8,7181 8,6954 9,0365 9,0396
3446 3447 3448 3449 3450	App. Soulp. Tucana App. Sculp. Plianicis Tucana	7.8 7.8 7.8 7.8 7.8 7.8	2 3 2 3 3	55 13,88 56 33,47 56 49,32 56 59,61 57 11,74	3,088 3,097 3,040 3,089 3,092	+8,9221 9,0960 8,9209 9,0444 9,0974	-7,2184 ,2410 ,0281 ,1314 ,1523	+0,4897 ,4909 ,4885 ,4898 ,4903	8,7028 9,0280 8,8991 8,9468 9,0250
3451 3452 3453 3454 3455	App. Soulp. Tucanæ App. Sculp.	7.8 7.8 7.8 7.8 6.7	3 5 4 3 3	58 44,36 59 7,83 59 15,18 59 20,49 59 55,08	3,073 3,071 3,072 3,071 3,068	+8,9380 8,9380 9,0961 9,0864 8,9074	-6,6058 6,4217 6,4629 6,3283 5,6722	+0,4375 ,4873 ,4474 ,4873 ,4863	8,7436 8,7898 9,0231 9.00 <i>0</i> 5 8,6591

It will be proper to mention, that the places in the Brisbane Catalogue for 1825, have been brought up to 1840 for the sake of comparison, by applying 15 times the annual variation there given when corrected by the tables at pages CXIII and CXIV of Vol. I. am ignorant of the source from which the coefficient of precession there employed was derived, but from the character for care and acquiracy of the party to whom the reduction of the Brisbane observations was entrested, and the different and having arrived at a co-efficient, agreeing almost to identity with that which he has employed, (see note at page CXIX Vol IV) there can I think be little doubt of its accuracy.

	Declination			Logarit	hms of		Differ		he Brisbane	Catalogue.
No.	(South.)	Annual							ascension com	Declin.
110	Jan. 1. 1840.	Precession	·· a'	b' '	c'	d'	No.	M, C.	T.	Decirio.
0.401	6 / 1/	10.000	0.0056	9,9137	+1,3010	+8,8175	7339	1,98	3,48	≟11,2 <b>4</b>
3421 3422	55 15 29,41	+19,998   19,999	+9, <b>2</b> 956 , <b>3</b> 636	9,9137 8821.	3010	,8098	7340	- 3,76		+ 8,26
3423	49 49 33,68 27 55 <b>57</b> ,00	20,005	5514	6694	3011	,7773	7342	- 2,78	<u> </u>	+ 1,63
3424	41 11 29,66	20,006	4609	,8176	3012	7710	7343	, 2,61	<b> 3,</b> 54	+0,22
3125	32 48 41,33	20,010	,5250	,7329	<b>,301</b> 2	,7468	7344	<b>—</b> 2,27	, —	4,48
3426	32 46 27,14	20,010	+9,5250	-9,7325	+1,3012	+8,7468	7346	∔ 1,75	1 1	1,68
3427	51 0 15,83	20,010	3617.	,8897	,3012	,7445	7846	$-1,\Pi_{i}$		+ 0,53
3428	48 40	20,013	3944	,8749	,3013	,7212	7347			(2) 1.7.5(j
3 <b>42</b> 9	58 2 15,02	20,016	,2718	,9245	,3014	,6991	7348		<b>— 3,</b> 19	<u> </u>
3430	43 4 57,93	20,016	,4533	,83:36	,3014	,6991:	7349		4,05	
3431	51 1 12,76	20,023	+9,3784	_9,8901	+1,3015	+8,6332	7353	- 1,24	(, )	0,00 ~
3432	58 10 12,01	20,024	,2900	,92⊰3	,3015	. 6220	7354		<b>— 4,64</b>	
3433		20,025	,3522	,9055	3016	,6000	7355	L,08	- 2,92	+ 4,55
3434	30 22 36,92	20,037	,5527	,7032	,3016	,6704	7358	-2,71	, <del></del>	- 2,78
3435	51 53 15,57	20,028	,3802	,8955	,3016	,5570	7359	- 1,02		+ 0,60
3436	51 45 32,08	20,0.9	+9,3838	-9,8947	+1,3017	+8,5392	7361	- 1,46	): <del>-,</del> ,	+15,58
3437	41 4 53,76	20,030	,4843	,8171	,3017	,5318	7362	2,87	1.17	+ 7,80 + 0,47
3438	51 20 17,67	20,031	,3927	,8922	,3017	4980	7364 7365	-1,92 $-1,97$	3	+ 0,47 - 1,04
3439	49 42 3,17	20,032	,4116	,8819 ,8915	,3017	,4807 ,4693	7366	+ 3,02		+ 4,42
3440	51 13 43,09	20,033	,3970	,8810	,3017	31090		,		100
3441	41 2 17,36	20,033	+9,4900	9,8169	+1,3017	+8,4414	7368	2,41		+ 2,14
3442		20,034	,5132	7902	,3018	,4227	7369	1,55		+ 6,06
3443		20,085	,5587	57064	,3018	,3931	7370		- 9,26	-0.92
3444		20,036	,3181	,9306	,3018	,3613	7371	2,34		+6,58 +1,45
3445	58 43 4,39	20,037	,3201	,9315	,3018	,3025	7372	-30,35		1 44. 1940
3446	37 8 33,02	20,037	+9,5250	-9,7805	+1,3018	+8,2962	7373	- 1,72	4,59	+ 0.02
3447	57 43 58,40	20,039	3444	9269	3019	,1449	7375	+ 0,72		○ ← 3,69
3448		20,039	,5312	,7782	,3019	,1072	7376		.,	+2.53
3 149		20,040	,4024	,9023	3019	,0870	7377	3,17	0.00	3,40
3450	57 50 42,72	20,040	,3464	39275	,3019	,0548	7378	1,00	- 2,23	+ 1,36
3451		20,041	+9,5211	÷ -9,8056	+1,3019	+7,6678	7379			3,10
3452		20,011	,5924	8317	3019	7,4637	7380		2,20	
3453			,3636	,9270	3019		7381	. , . ,		- 0,50
3454		20,011	,3729	9239	3019		7389			+ 3,71
3455	34 25 13,95	20 0 11	,65:39	,7520	,3019	6,7648	7383	$3 \mid -1,57$		+ 1,70
1	M	1	II .	In the	1 22	A Section	. !!	1 1	le	1

On inspecting the column "Difference from the Brisbane Catalogue"—it will be observed that a great number of blanks occur:—several, and by far the greater number of these, it will be found—arise from the Star's place not having been given in the Brisbane Catalogue; there are several other blanks however, which arise from other causes, such as the star not being visible, or the difference being immoderately large &c. &c.; in all these cases I have gone back to the original observations, and after bestowing considerable pains in endaevouring to account for the one or the other, have come to the following conclusions.

## Civi Remarks and Memoranda with regard to the foregoing Catalogue:

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24 The Declination differs 9' 55",64-The Brisbane Catalogua appears to bo 10' in error. (see errata.)
 53 In the Brisbane Catalogue, the A. R. of No. 52 has probably been observed.
      If there is a star here, it must be a vory faint one-one not visible at Madras.
      Apparently an error of 30 seconds in the A. R. set down in the Brisbane Catalogue.
117
      No star nearer to the place assigned in the Brisbane Catalogue than that here given.
137
    Exhibits a large difference in the A.R. This star was inserted in the present catalogue through inadvertence, as its place had already been given from former observations in Vol. IV. thus. Vol. 1V. No. 126; from 2 observations reduced to January 1, 1840 the A.R. = 1h. 0m. 28,67s.
153 Exhibits a large difference in the A. R.
          V. No. 163; --- 3 -
166 Apparently an orror of 30 seconds in the A.R. set down in the Brisbane Catalogue.
174
      Tho N. P. D. in the Brisbane Catalogue appears to be 1' in error.
222
      No star here.
256 -
      The A. R. in the Brisbade Catalogue appears to be one minute in error.
      Probably an error of 30 seconds in the Brisbane Catalogue, as there is no other star.
347 Both of those stars were observed on the same ovening; the large differences. both in ACR, and Declination,
348 ʃ 🗄 are no doubt duo to-proper motion : i. c. No. 348 exhibits an A. P. M. in A. R. of nearly 4 seconds of space
      Is this the result of P. M?—If not, the Brisbane Catalogue is probably 20 seconds in error.
416
      No star hore.
429
      Has been looked for repeatedly. No star liere: probably 420 has been observed, and the Declination registered
       10 degrees wrong:
      The A. R. in the B. catalogue is no doubt one minute in error.
467
      There is no Star in the place assigned by B., there is however another star, near to 473—whose place has
      bean observed as follows
                                       A. R. Jan. 1. 1840
                                                                 5 Declination Jan 1, 1840
      from 3. obs. 8. mag.
                                      2h. 69m. 37,03s.
                                                                 2 -51°. 56'. 47,07".
183 Is one of a cluster of stars : in selecting the most conspicuous one for observation, it appears I have not hit
      upon the one observed by B. thus
                                                                                       -51°, 2', 41*,09,
                     from 3, obs. 8, mag.
                                                  A. R.=3h. 3m. 8,67s.
                                                                              Declin.
      Diffors-4', 57",32 in Declination. B. is probably 5' in error.
489
      No star hero: same as 495.
494
525 No star hore: - probably the A. R. given by B. is 15 seconds in error.
      No star hare :- probably the Declin. given by B. is 10 minutes in error.
539
      Differs-1', 25",89, in Declination from the B. place. Havo I observed a wrong star with the oircle,?
542
563 The Declination in the B. catalogue appears to be 10'. in error.
585 No star hero. The nearest star is situated as follows
                                    A. R. Jan. I 1840
                                                                   Declin. Jan. 1, 1840
           from 4 obs. 9 mag. }
                                   3/r. 36m. 16,55s.
                                                                    -60°, 36′, 8″,86,
      The A. R. in the B. catalogue appears to be 30 seconds in orror.
      No star hore. The nearest star is situated as follows
                                    A. R. Jan. 1, 1840
                                                                    Declin Jan. 1. 1840
         from 4 obs. 7 mag.
                                    3h. 39m. 56,71s.
                                                                 . --48°, 33′, 37″,74,
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686 The A. R. in the B. catalogue is probably 10 seconds in error.
705 The A. R. in the B. catalogue is probably 30 seconds in error

11.00

Two stars have been observed here:—that set down, differs in A. R. about two minutes from the B. catalogue: one or other is no doubt wrong. -The other star is situated as follows. A. R. Jan. 1, 1840. Declin, Jan. 1, 1840. From 3 obs. 7 mag. 7' 27",53. 4h. 25m. 10,04s. Differs from B. -29 ,43. ---56,49. 785 The A. R. in the B. oatalogue appears to be 45 seconds in orror. 824 The A. R. in the B. catalogue appears to be 10 seconds in error. 890 No star hero. The nearest star is cituated as follows. A. R. Jan. 1, 1840. Deolin Jan. 1. 1840. From 2 obs. 10 mag. 5h. 5m. 39,39s. --49° 10' 909 Was not observed in consequence of an error in the observing catalogue. 917 The re-observation of this star does not exhibit proper motion, hence I conclude the B. catalogue to be in error. 981 The B. catalogue appears to be 10 ecconde in error. 986 Differs +10' 7",14 from the B. catalogue. 1045 Differs +1' 58",71. from the B. catalogue. 1046 Differs -5' 1",89. from the B. cataloguo: re-observation exhibits no proper motion. 1058 The B. catalogue appears to be one minute in orror in the A. R. 1062 It appears that I have inadvertently re-observed 1056. I rather suspect that there is no star here. 1116 The noarest star to the place assigned by B. ie as follows A. R. Jan. 1. 1840. Dolin. Jan. 1. 1840. From 2. obs. 0.7 mag. 5h. 56m. 19,32s. -43° 54′ 29,″67. -25,54. Differs from B. 6 25, 15. 1121 This large difference in the A. R. I suspect arises from proper motion. I had selected the first of these for observation, but have inadvertently observed the second thus A. R. Jan. 1. 1840. Declin Jan. 1. 1840. Frem 6 obs. 6.7 mag. 5h. 58m. 8,34s. -58° 6′ 18,"93. 12 Differs from B. M. C.—2,88. 6, 93. Т. -3,61. 1126 No star here. There is a star here, but being of the 11th magnitude, it could not with any degree of accuracy be observed. 1135 No star here: - probably B. has re-observed 1134 with an error of one minute in the A. R. No star here: -two stars near to the place assigned by B. have been observed, thus. A. R. Jan. 1. 1840. Deolin, Jan. 1, 1840. From 2 obs. 8.9 mag. 6h. 2m. 13,82s. -699. 484. 347,31. 2. 27,33. - 2 obs. 9 msg. 59. 46. 56 ,31. 1. 40,85. - B. catalogue. -59. **48. 4**3 ,60.

No star here:—two stars in the neighbourhood have been observed; thus

A. R. Jan. 1. 1840.

From 1 obs. 9.10 mag.

- 2 obs. 8. —

- B. catalogue

A. R. Jan. 1. 1840.

A. R. Jan. 1. 1840.

- 32°. 23′. 19″,58.

- 4. 27,63.

- 32. 24. 15,77.

- 32. 16. 20,95.

1160

1171 No star hero: - The nearest star is situated as follows

From 2 obs. 7.8. mag. { A. R. Jan. 1. 1840. { Declin. Jan 1. 1840. } -31°. 56′. 27,″36.

- 1200 The B. catalogue appears to be one minute in error in the A. R.
- 1211 Has been overlooked.
- 1239 Is probably too faint for observation at Madras.
- 1277 There is a star of the 11th mag. in or near to the place assigned by B.

A. R. Jan. 1. 1840.

Declin. Jan. 1. 1840.

6h. 32m. 36,07s.

Differs from B.

Declin. Jan. 1. 1840.

-38°. 0′. 53″,92.

4. 50 ,34.

- 1315 No star hero:—The Declination set down rolers to No 1307, which has been re-observed for 1315. There appears to be an error of 1 minute in A. R. in the B. catalogue.
- 1321 Samo as 1320.
- 1353 A star of the 9th mag. fellows this at 1,17s. and 51",1 to the North.
- 1362 The Doclination set down in the B. catalogue appears to be 1'. in orrer.
- 1398 No star hero: -The noarest stars to the place assigned in the B. entalogue are situated as follows.

A. R. Jan. 1. 1840.

From 2 obs. 7.8 mag.

— 4 obs. 8 — 49. 32,21.

— B. catalogue.

A. R. Jan. 1. 1840.

6h. 49m. 37,04s.

49. 32,21.

— 37. 24 13 ,14.

— 37. 21 40 ,16.

- 1441 No star here:—same as 1450.
- 1482 The A. R. in the B. catalogue appears to be 1 minute in error.
- 1487 Was inserted in the catalogue through inadvertence.
- 1491 The A. R. in the B. catalogue appears to be 10 seconds in orrer.
- 1501 The Doclination of this star as set down in the B. catalogue appears to be 1'. in error.
- 1531 Ne star here:—probably the same as 1532, save that an error of 30' in the Declination and 1 minute in A. R. exists in the place set down in the B. catalogue.
- 1543 No star here: -the nearest star to the place assigned in the B. catalogue is as follows.

A. R. Jan. 1. 1840. Doclin. Jan. 1. 1840.

Prom 2 obs. 7 mag. 7h. 11m. 32,11s. — 50°. 13′. 9″,32.

+ 52,97. + 9. 28,22.

1574 I hositated to insert the place of this star in the catalogue, in consequence of some doubt relative to the observed A. R.; but with this by way of caution, and after a careful re-examination, I may now give the results.

A. R. Jan. 1. 1840. Declin. Jan. 1. 1840.

Prom 3 obs. 6.7 mag. 7h. 16m. 45,84s. — 52°. 1′. 7″,98.

Differs from B. 34,48. — 0,05.

1577 The place of this star was not inserted in the catalogue, from my fears that the A. R. of 1578 had been by mistake observed: with this doubt still on my mind I will give the results.

A. R. Jan. 1 1840. Declin. Jan 1 1840. From 2 obs. 7 mag, 7h. 16m. 30,22s. —51°, 63′, 52″,90. Differs from B, — 8,75. + 4,06.

- 1567 The A. R. in the B. catalogue appears to be 1 minute in error. (ace errata)
- 1573 The A. R. in the B. catalogue appears to be in error.
- 1608 The A. R. of this star as set down in the B. catalogue appears to be about 50 seconds in error.
- 1645 No star here: -- probably 1644 with 1°. orror of Declination.
- 1662 The Declination in the B. catalogue appears to be 1'. in error.
- 1685 This star has not been observed, the A. R. as set down-is a re-observation of No. 1683.
- 1696 The Declination from the B. catalogue Differs 3'. 59,"36; our result appears correct.
- 1710 A vory faint star; -one that could not be accurately observed.
- 1751 The Declination differs -4'. 17,"16. from that deduced from the B. catalogue, and the A. R. too,—exhibits a plus instead of a minus difference: has this star a large proper motion?
- 1782 Has been looked for but not observed; I suspect the place given in the B. catalogue to be incorrect.
- 1791 It would appear that I have not observed the star intended by B., in which case it will be as well to set down all lave observed: thus.

- 1809 The Declination from the B. catalogue appears to be 1'. in error.
- 1821 The A. R. from the B. catalogue appears to be 10 seconds in error.
- 1832 The A.R. from the B. catalogue, appears to be 10 seconds in error.

- 1845 Not observed,—Is this the same as 1849?
- Was by mistake inserted twice in the catalogue, previously to being ro-examined to discover which was the right star: the cause for this re-examination, was, that I had observed this star four times as hoing double, whereas B, had not noticed this eiroumstance (see errata.)
- 1857 Same as 1854.
- 1862 There are so many stars here of the 6. 7. magnitude that it is almost impossible to identify any single one.
- 1875 Is a double star as mentioned by B. who it would appear has observed the first.
- 1877 Was inserted in the outalogue by mistake, it not having boon observed.
- 1886 The A. R. in the B. catalogue appeara to be 30 seconds in error.
- 1893 If there is any star here it must be a faint one, has not 1895 been re-observed by B?
- 1909 The A. R. from the B. catalogue appears to be 40 seconds in error.
- 1913 The A. R. from the B. oatalogue appears to be 10 seconds in error.
- 1958 No star hore. B. says 'it forms one of a group.'

# REMARKS AND MEMORANDA WITH REGARD TO THE FOREGOING CATALOGUE.

1966 Plenty stars here. I have it appears not observed the star selected by B. but have observed two other stars,

A. R. Jan 1. 1840. Declin. Jan. I. 1840. 8h. 11m. 23,78s. —34°. 40′. 46,80°. —34. 48. 53,66.

1987 The A. R. from the B. catalogue appears to be 10 seconds in orror.

1992 The A. R. of this star was accidentally omitted in the catalogue, thus

From 5 obs.

A. R. Jan. 1. 1840 = 8h. 15m. 45,38s.

Oiff. = +20,58s.

or it would appear the A. R. from the B. catalogue is 20 seconds in error.

2028 The Doclination from the B. catalogue appears to be I'. in error.

2029 No star here: -- probably the same as 2027.

2040 The large differences here mot with probably arise from proper motion.

2045 Same as 2044.

2050 No star hore.

2052 The Declination from the B. catalogue appears to be 10'. in orrer.

2079 The A. R. from the B. catalogue appears to be one minute in error.

2111 No star here: two stars noar to this have been observed as follows.

A. R. Jan. 1. 1840. Declin, Jan. 1. 1840. — 56°. 59′. 29″,12. — 2 obs. 9 — 8. 31. 6,02. — 56°. 59′. 29″,72.

2142 Has been repeatedly everlooked, is not this the same as 2143?

2191 No star here. Three stars near to this place been observed: thus.

A. R. Jan. 1. 1840. Declin. Jan. 1. 1840.

From 1 obs. 7.8 mag. 8h. 39m. 19,33s. -47°.24′. 25″,76.

- 1 - 8 - 8. 40. 27,40. -47. 20. 50,25.

- 1 - 8 - 8. 41. 8,86. -47. 19. 36,95.

2210 Other stars have been observed.

2240 Ne star here, two other stars have been observed as follows.

From 1 obs. 7.8 mag. A. R. Jan. 1. 1840. Declin. Jan. 1. 1840. — 53°. 40′. 46″,02. — 34. 48,77.

2245 No star here.

2246 Tho A. R. from the B. entalogue appears to be 30 seconds in error: (see errata)

2316 The Declination from the B. catalogue appears to be 50' in error.

2331 The noarest star to the place indicated by B. is situated as follows.

A. R. Jan. 1. 1840. Declin. Jan. 1. 1840. 9h. 0m. 11,46s. —60°. 36′. 53″,63.

2347 The A. R. from the B. catalogue appears to be one minute in error.

2363 I have probably observed a different star from that neticed by B.

2371 The nearest star to the place indicated by B. is situated as follows.

A. R. Jan. 1. 1840.

Prom 5 cbs. 9 mag.

9h. 4m. 25,30s.
+ 27,24

Declin. Jan. 1. 1840.

-51°. 36′. 39″,93
- 33 ,66

2383 I have observed another star.

2377 The A. R. from the B. catalogue appears to be 1 minute in error.

2468 The nearest stars to the place indicated by B. are cituated as follows.

From 3 obs. 7.8 mag.

9h. 17m. 55,69s.
9. 18. 4,34

Declin, Jan. 1. 1840.
—52°. 12′. 5″,40
—52. 3. 49,48

2473 The A. R. from the B. catalogue appears to be 10 seconds in error.

2484 The Declination from the B, catalogue appears to be 5' in error.

2502 The nearest stars to the place indicated by B. are situated as follows.

A. R. Jan. 1. 1840. Dsclin. Jan. 1. 1840. From 2 obs. 10 mag. 9h. 21m. 7,81s. —52°. 17′. 9″,50 — 2 — 9. 23. 47,11 —52. 21. 28,75

2510 No star bers. The nearest star to the place indicated by B. is situated as follows.

A. R. Jan. 1. 1840. Declin. Jan. 1. 1840. From 3 obs. 7.8 mag. 9h. 22m. 56,70s. —47°. 46′. 48″,14

2533 No star hero :- same as 2524.

2538 No star hero: -- same as 2530.

2548 No star hore: -- samo as 2539.

2556 No star here: -- same as 2558 with 30 seconde error of A. R.

2560 This star is probably affected with a large propor motion.

2618 No star here.

2731 This star is probably affected with a large proper motion.

2743 Not sasn: - prebably sams as 2736 with 1m error in A. R.

2774 No star hore: -sams as 2776.

2798 Was inserted in the oatalogue through inadvertance, as it had not been looked for.

2797 The A. R. from the B. catalogus appears to be 30 seconds in error.

2808 The A. R. from the B. catalogue appears to be 20 seconds in srror.

2814 Samo as 2815 with an arror of 5' in Daolination.

2824 Not observed with the circle through a mistake of 1° in the N. P. D.

2837 The Declination from the B. catalogue appeare to be 1' is error.

2847 The Declination from the B. ontalogue appears to be b' in orror.

2868 No star here: probably same as 2864.

2947 Inis star is probably anected with a large 1. m.

2957 No star here.

2965<u>^</u> 2966

2967

2959 The A. R. from the B. catalogue appears to be 30 seconds in error.

2971 No. obs. A. R. Jan. 1, 1840, Declin. Jan. 1. 1840. mag. Diffs, from B. cat. From 2965 $10h.\ 14m.$ ---69°.4′. 51″.46 7 34,75 2966 14. -58. 51. -0.874 ,27 -0 ,97 6 7.8 14. 2967 36,89 -2.012971 7 14. 56,47 -2.23**--58.49.** 50,67 +4.12

The occurrence of several stars in the field has given rise to some confusion and the omission from the cuta-

2977 No star here :- probably the same as 2985.

2979 No star horo: - probably the same as 2981.

2983 The A. R. from the B. catalogue appears to be 10 seconds in error.

Other stars observed

2990 The A. R. from the B. catalogue appears to be one minute in error.

3020 No star horo: -I have observed a small star near to this as follows.

A. R. Jan. 1. 1840. Declin. Jan. 1. 1840. IOh. 20m. 15,63s. —52°. 37′. 22″,00

loguo of 2966 and 2967: The following will I believe be found correct.

3029 Is probably affocted with P. M. in Declination.

3056 No star horo: probably the same as 3052.

3061 The Declination from the B. catalogue appears to be 1' in error.

 $\frac{3063}{3066}$  The A. R. from the B. catalogue appears to be one minute in error.

3077 The place of this star was not inserted in the catalogue in consequence of a large difference in the Declination from that assigned by B. my observations give as follows.

A. R. Jan. 1. 1840.

From 3 obs. 7.8 mag.

Difference from B.

A. R. Jan. 1. 1840.

10h. 26m, 45,81s.

1,70

Declin. Jan. 1. 1840.

-47°. 2′. 5″,43

-47°. 7, 7,39

3076 The result here given is a re-observation of 3066, save that the A.R. is one second in error. There is I believe no star here.

3078 Soveral stars here: I either have observed the wrong one, or the A. R. from the B. catalogue is 30 seconds in error.

an ber Jake 🐞

3081 Has this star any P. M. in Declination ?

3090 I have observed a star noar to this as follows:

3100 No star here, probably the same as 3099.

3116 I have observed two stars here, neither of which agree with B. thus.

From 2 obs. 7.8 mag.

— 1 — 8 —

A. R. Jan. 1. 1840.

Declin. Jan. 1. 1840.

— 57°. 23′. 47″,08.

— 57°. 23′. 47″,08.

— 57°. 26′. 54′,75.

— 10′. 89′—3. 2,40

- 3126 Is not this the same as 3128 with 10 seconds error in A. R.?
- 3150 No star here: probably the same as 3159 with 1m. error in A. R. and 10'. error in Declination.
- 3155 The place of this star was not inserted in the catalogue on account of a large difference in the A. R. from that assigned to it in the B. catalogue; thus.

A. R. Jan. 1. 1840. Doclination.

From 2 obs. mag. 10h. 35m. 1,78 — 38°. 51′. 30″,59

Difference from B. — 16,77 — 9 ,58

- 3168 The A. R. from the B, eatalogue appears to be one minute in error.
- Three observations at either instrument intended for this star, turn out to be a re-ebservation of No. 3175, and no mention of another star being visible is made:—what has become of 3177?
- 3254 No star here: came as 3255.
- 3271 The Declination from the B. catalogue appears to be 10'. in error.
- 3272 Was inserted in the oatalogue by mistake as it had not been looked for.
- 3275 No etar here: probably a re-observation of 3274 with 1°. error in Declination.
- 3326 I have re-observed 3317 for this star: is there such a star as 3326?
- 3356 The A. R. from the B. entalogue appears to be 10 seconds in error.
- 3365 The A. R. from the B. catalogue appears to be 10 seconds in error.
- 3397 Ne star here: same as 3394. I have observed a small star near to place indicated by B. as follows.

A. R. Jan, 1. 1840.

From 3 obs. 9 mag.

10h. 59m. 46,81s.

- 9,70

Deolin. Jan. 1. 1840.

-- 52°. 26′. 9″,38

-- 1. 36,28

- 3405 I had committed an error in the observing catalogue by which this star has not really been looked for.
- 3435 The A. R. from the B. catalogue appeare to be 30 seconds in orror.
- If this star really existed as it appears in the B. catalogue—so near to 3437,—would it not have been marked double? It is I think more than probable, that the place in the B. catalogue is in error. My observations give as follows.

A. R. Jan. 1. 1840. Deolin. Jan. 1. 1840. From 3 obs. 9 mag. 11h. 4m. 34,31s. —59°. 30′. 31″,47 Difference from B. — 37,80. + 5,92

- I have observed No. 3447 instead of this, whereas it appears from the B. catalogue that the former is the brighter star. Is not the place in the B. catalogue n re-observation of 3450 with 2° error in the Declination?
- 3458 I have observed a star near to this, as follows.

A. R. Jan. I. 1840. Declin. Jan. 1, 1840. Prom 3 obs. 9 mag. 11h. 5m. 25,71s. —28°. 59′. 12″,62 —4. 24,90

3460 There is a star cituated in the neighbourhood of the place assigned by B. thus.

From 3 obs. 10 mag. 

A. R. Jan. l. 1840.

11h. 6m. 8,41s.

+ 30,96

Declin. Jan. 1. 1840.

-60°. 34′. 12″,92

6. 48 ,99

### clxiv Remarks and Memoranda with regard to the foregoing Catalogue.

- 3482 No star here: same as 3481,
- 3487 Is this large difference of Declination the result of propor motion?
- 3505 I have observed two stars here, neither of which agree with B. thus.

	A. R. Jan. 1, 1840.	Declin, Jan. 1, 1840,
Frem 2 obs.	11h, 8m, 35,58s,	-36°, 57′, 15″,92,
_ 2 _	11. 10. 18,95	<b>-36.</b> 54. 30 ,99
whereas, from B. cataloguo	11. 9. 32,35	36, 58, 29,89

- 3512 No star hore: perhaps a re-observation of 3513 with 1° error in Declination.
- $\frac{3518}{3519}$  The B. right ascension of each of these, appears to be 10 seconds in error.
- 3526 No star here: same as 3532,
- 1 have once observed a star near to this, but the observation being marked Doubtful, it will be better not to give it: I think however, that the B. place of this star is erroneous.
- 3569 The A R. from the B. Catalogue appears to be one minute in error.
- 3577 No star here: same as 3578,
- 3587 No star hero: samo as 3584. The declination set down, is a re-observation of 3584.
- 3623 The A. R. from the B. Catalogue appears to be 10 seconds in error.
- 3630 No star hore.
- 3642 Nos. 3681 and 3633 have been inadvertently observed instead of these.
- 3672 B. says "A prodigious number of small stars horo &o." Why was not the same remark made with reference to 3666? I think there must be some mistake in the B. place. No star here.
- 3688 The A. R. from the B. Catalogue which was determined with the transit Instrument, probably pertains to another star;
  I have observed as follows.

- 3704 Have I observed a different star from that intended by B, or is this a case of large P. M.?
- 3762 The most conspicuous star and indeed the only observable one in this neighbourhood, is situated as follows.

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A. R. Jan. 1, 1840,

From 2 obs. 9.10 mag. 11h. 39m. 33,95s

— the B. Catalogue M. C. 38. 

— T. 45,90

Declin. Jan. 1, 1840,

— 61° 44′ 14″,58

— 61 45. 38,52
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- 3784 No star here: probably B. has re-observed 3800 with an error of two minutes in the A. R.
- 3836 B. says " Double, unequal." I have observed as follows.

	A. R. Jan. 1. 1840.	Declin, Jan. 1, 1840.
From 1 obs. * 9 mag.	11h. 48m. 37,19s.	-31°, 22′, 47″,36
- l obe # 9 mag.	48. 38,72	<b>—31.</b> 22. 47 ,36
- the B. Catalogue.	48. 35,87	31. 22. 43 ,05

\* Haze, -not to be dopended upon in consequence.

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3869	No other star in the neighbourhood:—The declination from the B. Catalogue is no doubt five minutes in orror.							
3889	No star here: same as 3890.							
3928	On examining the transit observations of this star, at first I felt disposed to admit—that I might through inadvortence have observed 3930 instead of 3928, but on further search, I find that both of these stars were observed.							
	ed on the same evening; the former at the three first wires, and the latter at the other two. The A. R. from							
	the B. Catalogue is no doub	t orroneous,	•					٠.
3937	The A. R. from the B. Catal	oguo appears to be 10	seconds in	orror.				
3952	Seo errata.		+ F+ 1				to de la companya di salah di Managaran	
401 <b>1</b>	The nearest star to the place assigned by B. is situated as follows.							
	From 3 obs. 8 mag. — the B. Catalogue.	A. R. Jan. 1, 1840, 12h. 12m. 17,47s. 12, 34,22		Declin. J. —26°. —26.	an, 1, 184 55′ 25, 50. 49,	0. 29 75	The short of the state of the s	
4020	The observing N. P. D. was	taken out wrong.					, 1	,
4026	Was inserted through inadvertence, as 4023 had been re-observed instead of it. Is there any star here?							
4040	The nearest star to the place assigned by B. is situated as follows.							
	From 3 obs. 10, mag. — the B. Catalogue	A. R. Jan. 1. 1840. 12h. 16m. 33,76s. 16. 51,92		Deolin J	an, 1. 184 45', 43", 44, 30	0. 94 31		
4065	No star here.				•			1 1 2
4079	No star here.							1.5
4088	No star hore.						1. A 1.	e de come
4111	No star here.					,		
4183	The observing N. P. D. was	taken out wrong.					y 1:	4 ( 3 )
4152	No star here: ssme as 4148.			1.7		et i despue	Administration	11.181
4208	I have observed as follows.							

150 IU 11.

Deolin, Jan. 1, 1840. -59°. 47'. 24",37.

Declin. Jan. 1. 1840.

**—59.** 44. 19 ,56

-59°. 46′. 50″**,0**7

---59. 44. **1**7,92

A. R. Jan. 1. 1840.

A. R. Jan. 1. 1840.

12h. 45m. 58,66s.

No star here: perhaps B. has re-observed 4291 with an error of 1° in declination.

The place of this star in the B, Catalogue is probably wrong, from a typographical error.

There is another star here, but I have some doubts about the accuracy of the observations.

44. 28,18

From 1 obs. 9 mag.

From 3 obs.

4272

4292

4295

4326

- the B. Catalogue I have observed as follows.

- the B. Catalogue.

8.9 mag.

4268 Has been insorted in the Catalogue through inadvertence.

I have observed 4275 instead of this: -does 4272 exist?

12h. 41m. 3,24s.

41, 49,92

#### clxvi REMARKS AND MEMORANDA WITH REGARD TO THE FOREGOING CATALOGUE. 4333 The declination from the B. Catalogue appears to be 10' in error. 4347 The A. R. from the B. Catalogue appears to be 10 seconds in error. 4355 These large differences are porhaps due to proper motion. 4359 The A. R. from the B. Catalogue appears to be 10 seconds in error. 4379 No star here. 4391 I have observed as follows. A. R. Jan. 1, 1840. Declin. Jan. 1, 1840. From 3 obs. 8.9 mag. 13h. 9m. 0.83s.-46°. 15′. 25″.42 - the B. Catalogue 8. 35.97 10. 18 ,85 4430 No star here. 4440 No star here: same as 4439. 4455 The observing N. P. D. was taken out wrong. 4463 No star horo: same as 4462. 4486 No star within 10 or 15 minutes of this. 4493 I have observed as follows. A. R. Jan. 1, 1840. Declin. Jan. 1. 1840. From 2 cbs. 7.8. mag. 13h. 22m. 2.45s.-47°, 0′, 45″,76 - the B. Catalogue 20. 59,25 2. 43 .81 No star here: probably B. has ro-observed 4524 with 2 minutes error in A. R. 4501 4516 No star here: samo as 4518. 4520 The S. P. D. sot down in the B. Catalogue portains to No. 4529;

No star here: probably B. has re-observed 4544 with 1° error in declination.

No star here: probably B. has re-observed 4568, with an error of 20 seconds in the A. R.

No star here: probably B. has re-observed 4599 with 20 or 30 seconds error in the A. R.

The declination from the B. Catalogue appears to be 1' in error.

No star here: same as 4604, with 1 minute error in the A. R.

The A. R. from the B. Catalogue appears to be I minute in orror.

No star here: same as 4629, with 5' error in declination.

No star here: same as 4633, with 1 minute error in the A.R.

4537

*45*43 4562

4565

4573

4601

4609

4631

4651 4652

4703

No star hore.

See errata.

4538 J

Only one star hero, namely 4537.

No star here: same as 4656.

No star here; same as 4722.

- 4744 No etar hore: probably B. has re-observed 4743, with an error of 1° in the doclination.
- 4776 This etar was inserted in the catalogue through inadvertence as it had not been observed.
- 4794 I have observed another etar: thue.

A. R. Jan. 1. 1840. Doolin. Jan. 1. 1840. From 3 obe. 8. mag. 14h. 3m. 7,16s. —55° 18' 32",14 —55° 16 38 ,37

- 4801 No star here: probably B. has re-observed 4800, committing an error of 1° in the declination.
- 4817 No etar here: probably B has re-observed 4818, committing an error of 10° in the doclination.
- 4837 No etar here.
- 4841 No star here.
- 4862 I have observed as follows.

A. R. Jan. 1. 1840.

From 1. obs. 10 mag.

— the B. oatalogue

A. R. Jan. 1. 1840.

14h. 10m. 19,26s

— 36° 6′ 53″,09

— 36 7 40 ,33

- 4900 The declination from the B. Catalogue appears to be I' in error,
- 4906 I have re-observed 4916: is there any other star?
- 4907 No star here: same as 4898 with one minute error in the A. R.
- 4921 The A. R. from the B. Catalogue appears to be one minute in error.
- 4956 See orrata. This star was observed on the same evening with 4955: according to the B. catalogue these two constituted a pretty close double star—is there another star?

通道

N. 3.

1 6h 1 1 25 147 1

- 4988 No ctar here :- came ac 4989.
- 5003 No etar horo: eame as 5009 with an error of one minute in the A. R.
- \$5006 The A. R. from the B. Catalogue appears to be one minute in error.
- 5008 The A. R. from the B. Catalogue appears to be one minute in error.
- 5017 1 have observed as follows.

From I obs. 9 mag.

A. R. Jan. 1. 1840.

14h. 31m. 55,12s

— tho B.

Declin Jan. 1. 1840.

— 45° 56′ 2″,65

— 32 34,99

— 45 53 2 ,20

Hae not B. re-observed 5016 with an error of 1° in the declination?

- 5075 No etar here: eame as 5074.
- 5076 No star here : came ac 5074.
- 5088 No star here:—same as 5089 with an error of 10' ia doclination?
- 5100 No star hero: perhaps B. has ro-observed 5101, with an error of 10 in declination.
- $\frac{5126}{5128}$  Only one etar here:—namely 5128.
- 5127 No etar here: perhape B. has re-observed 5128, with an error of 1° in the declination.
- 5142 The A. R. from the B. Catalogue appears to be one minute in error.

#### clxviii REMARKS AND MEMORANDA WITH REGARD TO THE FOREGOING CATALOGUE.

- 5154 No star here: probably B. has re-observed 5155 with an error of 10' in declination.
- Do these differences arise from error in the B. Catalogue or from proper motion? 5183
- 5194 The A. R. from the B. Catalogue appears to be 30 seconds in error.
- This is a double star. In the catalogue, the 1st in order of A. R. is given; the second is situated thus. 5201

From 2 obs. 9 mag. A, R. Jan. l. 1840. 15h. 0m. 5,25s Declin. Jan. 1. 1840. -43°. 5′ 45″,87

This star has been observed by me as the companion to 5206, which B. notes as "double unequal" The B. Catalogue appears to be 20 seconds in error.

- 5228 No star here: same as 5229 with an error of 5' in the declination.
- 5235 Is the large difference of Declination here found due to proper motion?
- 5253 No star here: - probably the same as 5251.
- No star here: probably the same as 6289, with an error of 10 seconds in the A.R. 5292
- 5314 No star hore. This star was introduced into the catalogue through inadvortence, as its declination exceeds the limits to which I had intended to observe: probably B. has re-observed 6311 which has been observed.
- 5327 No star hero:—probably B. has ro-observed 5316, with an error of one minute in the A. R.
- 5350 No star here: probably B has re-observed 5346, with an orror of thirty seconds in the A. R.
- 5382 The Declination from the B. Catalogue appears to be 5' in error.
- 5393 This star—if it exists, has been everlooked, and 5392 re-observed instead of it.
- No star here: probably B. has ro-observed 5428 with an error of 15' in the declination. 5427
- The A. R. from the B. catalogue is probably ten seconds in error. 5433
- 5447 No star hero: same as 5449.
- 5515 This is a double star. In the catalogue, the first in order of A. R. is given; the second is situated thus.

A. R. Jan. 1. 1840.

Deolin. Jan. 1, 1840.

From 2 obs. 8 mag.

16h, 43m, 5,12s.

—49°, 51′, 5″,17

- No 5521 has inadvertently been observed instead of this. 5525
- This is a close double star :- B. "says double unequal." In the catalogue, the first star in order of A. R. is given : 5613 the second is situated thus.

A. R. Jan. 1. 1840. 15h, 59m, 22,34s

Deelin, Jan. I. 1840. -32°, 12,′ 58″,97

From 1 obs. 7.8 mag.

No star here: -B. has probably re-observed 5626, with an error of one minute in the A. R.

- This star has only once been looked for, when it was not seen. Has B. re-observed 5634 with two minutes error of A. R?
- This star has been over-looked, and 5649 re-observed instead of it. 5639
- No star here; same as 5646. 5647
- 5665 No star hero: same as 5670.

5704 The A. R. from the B. Catalogue appears to be one minute in error.

5753 This star has been observed as follows.

A. R. Jan. 1. 1840. Declin. Jan. 1. 1840.

From 2 obs. 7.8 mag.
—the B. Catalogue

A. R. Jan. 1. 1840. —49° 2′ 56″ ,05
23 22,48

3 1 ,89

5789 The A. R. from the B. Catalogue appears to be twenty seconds in error.

5792 Preceeding this—is a star of the 8th magnitude, I' 3 to the north, and following it, at 6 seconds—is a star of the 8.9 mag. 30" to the north. B, does not mention this as being double.

5877 No star here: -- probably the same as 5869, with an error of one minute in the A. R.

5883 This star has only been looked for once, when a different one from that set down in the B. ontalogue was observed. The assistant noted "plenty stare here."

5887 Has this star a large P. M. in A. R-?

5929 No star here:—same as 5927

5960 Only one observation—Lither Brisbane or myself have probably committed an error of 1' in the Declin.

5968 The B. Catalogue appears to be 40 seconds in error in the A. R.

6038 A wrong etar has been observed at the circle.

6061 A Star hae been observed for this as follows.

A. R. Jan. 1. 1840.

From 1 obe. 7.8 mag.

17h. 12m. 45,43s.

+ 45,13

Declin. Jan. I. 1840.

-37° 38′ 19″,47

- 24,10

6233 No etar here: -- eame as 6227

6260 The nearest star to the place indicated by B. ie situated as follows.

A. R. Jan. 1. 1840.

From 2 obs. mag. 8

Differs from B,

A. R. Jan. 1. 1840.

17h. 44m. 12,66s.

+ 33,60

Declin. Jan. 1. 1840.

-35° 2′ 39″,09

- 2. 53 ,44

Has not B. re-observed No 6255, with an error of 40 seconds in A. R. and 1' in Declination?

6253 This star was inserted through inadvertence, as it had not been looked for.

6309 A Star has been observed near to this as follows.

A. R. Jan. 1. 1840.

From 2 obs. 8.9 mag.

17h. 66m. 13,44s.

+ 8,47

Declin. Jan. 1. 1840.

-36° 36′ 47″,69

+ 21,05

6314 The came as 6317. Another star has been observed near to this as follows.

A. R. Jan. 1. 1840.

From 1 obs. 8 mag.

17h. 58m. 3,39s.

17h. 58m. 3,39s.

10,96

2 30,26

6383 No star here.

6385 A Star has been observed for this as follows.

From 2 obe. 8.9 mag.

A. R. Jan. 1. 1840.

Declin. Jan. 1. 1840.

18h. 13m. 49,49s.

- 1 5,05

Declin. Jan. 1. 1840.

- 63° 42′ 29″,45

- 31 ,02

## CIXX REMARKS AND MEMORANDA WITH REGARD TO THE FOREGOING CATALOGUE.

- 6437 The Brisbane Catalogue appears to be 5' in error in the Declination.
- 6475 6476 6477 Only one Star here, viz No 6477.
- 6543 Is marked double in the B. Catalogue. It is strange that two stars should exist so close to one another as 6542 and 6543—both of the 6th magnitude,—and that the double Star should have been everlooked by Piuzzi as well as myself. Is not the Brisbane Catalogue in error?
- 6545 The Brisbane Catalogue appears to be one minute in error in the A. R.
- 6553 Same as 6555 with 1' error in the Declination set down in the Brisbane Catalogue.
- 6608 No star here: -- same as 6612.
- 6643 No star here; same as 6642.
- 6791 No star here: same as 6794,
- 6825 The A. R. from the Brisbane Catalogue appears to be 10 seconds in orror.
- 6827 No star here :- same as 6826.
- 6830 No Star hero: same as 6829.
- 6848 The nearest bright star to this, one of the 6.7 mag, is situated 9' 57" to the South.
- 8954 No star at the place assigned by B: two stars have been observed in the neighbourhood as follows.

From 2 obs. 6.7 mag.	A. R. Jan. 1, 1840.	Deelin, Jan. 1, 1840.
	20h. 51m. 35,30s.	-43° 37′ 6″,45
-4-6-	51 40,69	36 49 02
- B. Catalogue	60 83,66	37 5 79

It would appear that B. has observed the A. R. one minute too small.

- 6975 The Brisbane Catalogue appears to be several seconds in error.
- 6990 The A. R in the Brisbane Catalogue appears to be one minute in error.
- 6993 No star here:-probably 6994 has been re-observed by B. with an error of 5° in the Declination.
- 6995 No star hero.
- 7028 Nebulous :- several stars of the 8.9 magnitude, among which the two following were selected as being the brightest.

From 2 obs. 8 mag.	A. R. Jan. 1, 1840, 21h. 19m. 21,67s.	Declin. Jan. 1, 184057° 34′ 46″,00
— 2 — 8 —	19 26,78	39 2,04
- B. Catalogue	3 M. C. —19 14,24	- 34 55 79
	T19 17.31	

- 7050 No star here:—same as 7049.
- 7067 Further observation of the A. R. of this star does not alter the Madras result.
- 7076 The A. R. from the Brisbane Catalogue appears to be 30 seconds in error.
- 7110 This staria probably affected with a large proper motion, both in A. R. and Declination.
- 7132 I have observed this star as 5.6 or 6th magnitude: B. says 7th: will proper motion explain the large disagreement in the Declination?

- 7195 The A. R. from the Brisbano Catalogue appears to be 10 seconds in error.
- 7228 Further observation of the A. R. of this star confirms the Madras result. Has this star a large proper motion in A. R.?
- 7237 This star was inserted in the catalogue through inadvertence, as it had not been looked for.
- 7255 The Declination from the Brisbane catalogue appears to be 2' in error.
- 7265 No star here: -- samo as 7267.
- 7308 The annual variation of this atar in A. R. as set down in the Brisbane Catalogue, being erroneous, the A. R. itself is probably so too.
- 7314 The Madras Instruments failed to separate those two stars.
- 7347 No star here brighter than the 12th magnitude; the nearest star is situated as follows.

	. A. R. Jan. 1, 1840.	Declin, Jan. 1, 1840.
From 2 obs. 8.9 mag.	$23h.\ 47m.\ 40,97s.$	-48° 50′ 35″,94
Differa from B.	+ 1,27	— 10 б 63

7348 There are three stars here: B. has observed the A. R. of the first and third, opposite to which he has set the S. P. D. of the third and second respectively, the three stars are situated thus.

•	A. R. Jan. 1. 1840.	Declin, Jan. 1, 1840.
7348 From 3 obs. 7 mag.	23h. 48m. 20,66s.	—58° 2′ <b>1</b> 5″,32
- $ 1  7.8 -$	49 49,91	58 5 14,71
7354 - 4 - 7 -	50 11,55	-68 10 11 ,79

I suspect the relative magnitudes to be variable, but am unable to particularize either

## REMARKS UPON THE FOREGOING CATALOGUE CONTINUED.

Having now accounted for the several blanks which occur in the columns of Differences, it will not be amiss—to offer a few remarks relative to the differences themselves. Those for the A. R, it will be observed are almost all affected with the sign minus, exhibiting—that in addition to the incidental errors of observation, an error of a general nature exists in the Brisbane Catalogue throughout. In the appendix to the Brisbane Catalogue (Page 273) a similar conclusion had been arrived at, by comparing, the Brisbane places with those from Lieutenant Johnson's Catalogue (Observed

clausii Remarks and Memoranda with regard to the foregoing Catalogu.

at the St. Helena Observatory) it will then at least be interesting to compare the values of the correction now found necessary, with those which the St. Helena Catalogue has pointed out; thus

	cor. for obs. with M. C.   cor. for obs. with T.								
Declination.	J.—B.	т.—В.	Diff.	J.—B.	т.—В.	Diff.			
from 25 to 30 50 to 35 35 to 40 40 to 45 45 to 50 50 to 55 55 to 60 above 60	+2,12 2,03 2,16 2,12 2,20 2,26 2,10 2,31	+1,90 2,18 2,15 2,07 2,29 2,20 2,35 2,33	*. -0,22 +0,15 -0,01 -0,05 +0,09 -0,06 +0,25 +0,03	1,52 1,89 2,67 2,61 2,39 2,53 2,59 2,42	+2,41 2,61 2,63 2,63 2,61 2,76 2,66 2,78	\$. +0,89 +0,72 -0,04 +0,32 +0,22 +0,23 +0,07 +0,36			
	Mean	<u> </u>	-F U,02		<u> </u>	+0,34			

Hore it appears with reference to the Brisbane Catalogue,—that as far as the transits observed with the Mural Circle are concerned, the Madras observations attribute to them as near as need be, the same amounts of error as do those made at St, Holena; and with regard to the observations made with the Transit Instrument—when compared with the Madras observations they exhibit a general error of from 3 to 4 tenths larger than has been assigned to them by the St. Helena Catalogue. Now the former result, from the large number of comparisons which the Catalogue affords, is entilled to a considerable degree of credit, whereas the latter (from the few observations made with the transit instrument at Paramatta) is little to be relied upon. Since writing the above with a view of examining thow nearly the single results of the present Catalogue agreed with the St. Helena determinations, I have gone over the Madras Cataloguo, and found the several the cases for comparison which now follow: whilst thus occupied, I have discovered that several stars have crept into the present catalogue whose places had been given in the former Volumes of this work; thus affording a comparison of the present catalogue with former observations; and a few other Stars have been met with, whose places had been observed, but had been overlooked in the construction of the oatalogue: if we put T. to represent the Madras determination from observations in 1838 and 1839, and T' the same from former observations: B: the Brisbane place, and J. that from Lieutenant Johnson's Catalogue, we get as fol-

								<del></del>	<del></del>
No. in the B. cat.	Reference to former Obs.		TB. M. C   T.	т.—Ј.	т,—т′.	Declination Jan. I. 1840. (South.)	т.—В.	Т.—Ј.	T.—T'.
89 93 210 278 287	No. Vol. 34 of III 3 38 of III 3 167 of II 3 210 of II 2	3 0 36 27,71 3 1 24 35,21 3 1 49 43,47		+ ,37	- ,54 + ,01 - ,24 + ,19 - ,07	39 20.27,84 39 18 14,74 49 54 23,75 52 24 26,23 62 21 0,53	$ \begin{array}{r}     -2.70 \\     +0.48 \\     +1.25 \\     +3.15 \\     +0.72 \end{array} $	+ 3,5	+ 1,3 + 1,3 + 3,0 - 0.8 - 2,7
327 353 540 042 668	327 of 111 3	3 2 21 7,19 3 3 19 45,10 3 3 56 13,82	$\begin{array}{c cccc}  & 2,65 & -2,36 \\  & 2,21 & -2,45 \\  & -2,96 & -1,63 \\  & -2,33 & -3,40 \end{array}$	+ ,00	- ,81 + ,03 - ,03 + ,09 - ,72	52 15 18,09 48 25 24,18 30 29 0,46 61 51 12,01 42 24 51,00	- 1,48 + 3,17 - 5,74 + 2,40 + 0,15	+ 3,2	+ 6.0 + 0.8 - 1.5 - 0.4 + 0.2
682 732 744 1007 1090	462 of III   1 538 of 11   3 611 of III   1	3   4   11   50,64   1   4   27   14,21   3   4   30   32,90   1   5   33   35,42   5   50   20,03	- 2,74 - 3,19 - 0,71 - 2,35 - 2,42 - 2,56 - 1,70	+ ,11	+ ,10 - ,11 - ,10 + ,03 - ,05	51 53 32,62 30 5 39,04 55 22 40,23 40 47 57,72 31 24 30,65	+ 1.11 - 8,43 - 0.37 + 4,20 + 3,57	+ 2,3	+ 3,0 + 2,0 + 4,6 + 6,4 - 1,5
1124 1131 1158 1241 1389	077 of III 3	6 5 58 8,34 3 5 50 52,85 2 0 3 52,33 3 6 20 24,35 4 6 46 32,69	- 2,83 - 3,61 - 2,98 - 1,51 - 2,84 - 3.00 - 2,59 - 2,77 - 1,17	 ,1? ,37	- ,21 - ,45 - ,47	58 6 18,93 45 2 22,82 44 19 53,44 52 36 36,47 61 46 11,22	+ 6,93 + 1,68 + 1,98 + 2,36 + 8,09	+ 3,4	+ 3,2 - 0,1 + 5,4
1465 1064 1079 1697 1735	934 of III 941 of III	1 6 59 4,71 7 30 30,20 1 7 32 15,97 3 7 34 9,56 2 7 39 33,57	$ \begin{array}{c ccccc} - & 3,04 & - 4,26 \\ - & 0,53 & - 2,56 \\ - & 1,68 & - 3,62 \end{array} $		+ ,38 - ,22 - ,20	43 23 26 27 31,67 26 26 29,33 37 53 39,68 37 34 56,57	+ 4,58 + 1,02 +11,29 + 8,77		+ 1,0 + 1,1 + 1,7
1763 1778 1812 1835 1916	965 of II 971 of II 082 of II	2   7 42 33,95 3   7 44 21,70 3   7 48 36,10 4   7 52 42,60 3   8 4 34,00	$ \begin{array}{c cccc} -2,12 & -1,83 \\ -2,46 & -2,46 \\ -2,02 & -1,99 \\ -2,07 & -3,13 \end{array} $	- ,24 - ,00 - ,07	+ ,16 - ,30 + ,14 + ,22 + ,41	24 27 44,32 46 58 22,42 47 41 15,03 62 33 17,05 46 62 33,80	+ 2,48 + 5,26 + 5,92 + 6,26 + 0,75	+ 0,6 + 4,6 + 2.8 + 1,8	+ 0,8 + 1,1 - 1,1 + 2,4 - 0,2
1917 1946 2148 2163 2203	1067 of 1I 1071 of 11	8   8   4   36,51 1   8   8   41,28 4   8   36   42,58 3   8   37   4,60 3   8   53   3,50	$\begin{bmatrix} -2,03 \\ -2,39 \end{bmatrix} - 2,04$			59 35 52,02 52 21 19,94	- 2,35 + 3,57 + 5,23 + 5,53 + 7,72	$ \begin{array}{c c} -0.8 \\ +0.2 \\ +1.8 \\ +1.8 \end{array} $	+ 2,7 - 2,3 + 1,6
2311 2326 2352 2394 2400	1105 of 11 1115 of 11 11124 of 11	3 8 55 28,50 3 8 58 38,82 1 9 3 10,01 3 9 7 38,63 2 9 8 26,82	$ \begin{vmatrix} -1,94 & -2,47 \\ -3,12 & -1,71 \\ -2,94 & -1,46 \\ -2,70 & -2,93 \\ -1,53 \end{vmatrix} $	$\frac{ + ,16 }{ - ,20 }$	- ,09 + ,30 - ,06 - ,37 - ,04	46 27 46,02 29 42 56,85 01 39 30,21	+ 8,00 + 6,09 + 1,74 + 5,13 + 3,98	+ 3,2 + 3,3 + 4,3	+ 2.3 + 2.3 + 1.4 + 0.5 + 2,3
2426 2521 2536 2546 2546	1156 of III 1160 of II	3 0 12 48,53 2 0 24 41,06 4 9 26 21,63 3 0 28 1,07 3 0 28 5,82	$ \begin{array}{c cccc} -2.94 & -2.7 \\ -2.19 & -2.5 \\ -2.91 & -3.6 \end{array} $	39	,1 <i>δ</i> ,21 	31 10 8,98	+7.23	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	+ 1.9 + 0,6 + 2,9
2566 258' 263 265 275	8	3 9 29 48,26 2 9 32 37,60 2 9 38 22,01 1 9 39 31,80 3 0 51 15,26	- 5,28 - 2,54 + 15,		,26 	38 48 24,66 50 38 6,40 30 32 23,16	+ 4,01 - 3,49	2	

claxiv Remarks and Memoranda with Regard to the foregoing Catalogue.

No. in the B, cat.	former Obs.	No.	A. R. Jan. 1, 1840.	Т.—В. М. С. Т.	T.—J.	Т,—Т.	Declination Jan. 1, 1840. (South.)	т.—В.	;	ТТ′.
2802 2882 2971 2972 2981	No. Vol.	2 2 3 1 3	h m. 8. 9 56 34,64 10 5 50,10 10 14 56,47 10 14 58,57 10 16 34,50	$ \begin{vmatrix} s & s & s \\ -0.95 & - \\ -2.08 & - \\ -2.23 & - \\ -2.19 & - 3.05 \\ -1.99 & - 2.14 \end{vmatrix} $	8.	,16	59 20 32,44 57 15 23,34 58 49 50,67 55 14 27,24 28 50 24,21	+ 5,38 + 1,80 + 4,12 - 6,02 + 7,18		
2998 3032 3095 3099 3201	1251 of 11 727 of 1V	1 3 3 3 3	10.18 14,36 10 22 14,05 10 29 12,08 10 29 27,60 10 39 30,99	$ \begin{vmatrix} -3,36 \\ -1,35 \\ -0,38 \\ -1,11 \\ -2,33 \\ -1,52 \\ -2,33 \end{vmatrix} $		- ,04 + ,42 - ,33	60 45 37,93 29 47 26,40 36 49 42,58 56 43 48,69 52 20 55,52	$ \begin{array}{r} + 2.85 \\ - 0.04 \\ + 2.07 \\ + 0.83 \\ + 1.51 \end{array} $		- 1.0 + 1,0 - 1,9
3244 3390 3447 3448 3596	1382 of III		10 44 8,65 10 58 59,29 11 4 50,81 11 4 51,75 11 20 53,80	- 2,54 - 2,28 - 3,09 - 2,08 - 2,03 - 2,44		+ ,08	59 8 8,56 50 20 55,44 59 34 29,91 59 26 28,87 41 47 36,19	+ 0,41 9,68 + 0,07 5,29 + 1,29		- 1,0
3633 3705 3760 3832 3931	1411 of III 1423 of III 1381 of II	3	11 24 26,69 11 32 17,01 11 37 50,42 11 47 32,81 11 59 63,38	$ \begin{array}{c cccc} -1,22 & -2,70 \\ -1,16 & -2,82 \\ \hline -3,44 & -3,50 & -3.17 \end{array} $		- ,0 <sup>2</sup> + ,1 <sup>3</sup> + ,0 <sup>6</sup>	48 37 55,71 43 51,26,23 44 48 7,30 27 35 6,70 59 33 35,38	+4,64 $+6,44$ $-0,38$ $-13,18$		- 0,6 - 0,4 - 3,3
3934 3938 3959 4237 4275	1395 of II 1469 of III 1485 of II	3 2 1 3 3	12 0 5,78 12 0 38,82 12 4 17,70 12 45 14,05 13 50 51,63	- 2,82 - 2,36 - 2,92 - 1,09 - 2,60 - 1,85 - 3,61	- ,07 - + ,72	- ,09 - ,15 + ,10	49 49 52,84 43 25 56,22 59 8 55,88 56 18 24,71 59 30 39,60	- 1,6 + 2,2 + 2,2 + 0,4 - 4,9	3 + 0.9	+ 1,8 - 1,0
4285 4671 4733 4848 4880	1597 of 111 1709 of 111 1522 of 11	2 2 2	12 51 48,43 13 44 13,05 13 52 34,83 14 9 12,19 14 12 54,17	+ 0,42 1.73 0,92 3,13 1,54 3,53		— ,05 — ,16 — ,48	32 38 11,62 34 52 19,15 59 35 49,86 45 19 0,33 46 40 56,07	- 0,6 - 6,5 - 0,8 - 3,3 + 4,3	9	+ 0,2 - 0,2 - 1,5 - 1,5
4902 4903 4945 4945 4984 4971	1634 of 11 1635 of 11 1642 of 11 952 of IV 1814 of 111		14 15 54,00 14 15 55,36 14 21 52,74 14 21 44,14 14 25 52,78	$\begin{vmatrix} -3,49 \\ -2,28 \end{vmatrix} - 3,59 \\ -1,85 \end{vmatrix}$		+ ,07 + ,33 - ,29 + ,29 + ,29	44 29 34,82 44 39 6,13 49 44 36,01 45 45 16,14 45 32 31,89	+ 0,49 + 0,27 + 0,10 + 1,63 + 1,50	0,6	+ 0,8 + 3,2 - 0,6 - 0,4 - 1,4
4974 5007 5018 5068 5069		1 3 1 2 3	14 26 53,65 14 31 19,39 14 32 37,29 14 39 32,62 14 30 52,78	$ \begin{vmatrix} -2,67 \\ -2,76 \\ -2,36 \\ -1,98 \\ -2,43 \end{vmatrix} $	- ,18	- ,66  + ,17 	45 25 52,92 46 41 45,32 32 4 28,80 52 41 55,21 41 10 33,41	+ 1,1 + 2,5 + 2,7 + 5,5 + 2,4	3 7- 1,8	- 0,1
5223 6289	1880 ot 111	3 1 1 2 2	15 3 17,28 15 5 22,52 15 5 34,45 15 15 0,82 15 16 58,44	- 0,88 - 2,12 - 1,67 - 5,65 - 3,38		 	42 44 57,13 59 29 50,86 40 53 30,00 05 19 21,45 65 23 0,57	+ 3,07 - 0,7 - 2,9 - 0,1 - 0,7	8 =	- 4,2
5380 5428 5521*	1760 birdul -1806 of File 1835 of 11 1987 of 111	173161481	10 DO VIII	$ \begin{vmatrix} -1,38 \\ -2,51 \\ -3,35 \\ -3,37 \\ -0,28 \end{vmatrix} $	+ ,14	+ ,09 + ,61 ,00 ,33	40 376 23,33 51 50 38,16 24 21 39,00 36 18 37,51 30 18 52,97		$\begin{vmatrix} 1 & -1 \\ 1 & -1 \end{vmatrix}$	1 0.1 0.8 0.8 0.2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

No. in the B. cat.		No. obs	A. R. Jan.	Т.—В. М. С. Т.	Т_J.	T.—T'	Declination Jan. 1, 1840 (South.)	Т.—В.	т.—Ј.	TT.
5614 5652 5667 5670 5731	No. Vol. 1994 of III	1 1 1 1 2	h. m. s. 15 59 38,09 16 4 59,41 16 6 47,08 16 7 10,08 16 16 42,70	- 2,91	<i>Si</i>	*,14	33 6 51,81 52 40 32,32 59 0 38,86 59 0 16,46 45 57 6,21	- 1,84 + 0,90 + 4,89 + 3,09 - 1,40		2,7
5747 5766 5767 5828 5801	1889 of 11 2042 of 111 1910 of 11 2089 of 111	1 1 2 1	16 20 56,03 16 25 42,93 10 25 51,32 16 36 0,27 16 41 6,83	- 1,43 - 2,59 - 2,00 - 1,44 - 2,36 - 2,51 - 2,09	+ ,61 - ,22 + ,16	+ ,51 - ,18 - ,11 + ,07	34 20 57,01 34 55 11,03 58 44 40,11 41 34 25,69	- 1,65 - 6,47 + 3,75 + 3,42	+ 5,3	- 0,3 0,0 + 2,3 - 0,4 - 1,9
5865 5869 5913 5976 6012	1087 of 1V 1100 of IV 2135 of 111	! ! 2 2 !	16 41 34,99 16 42 13,35 16 48 3,49 10 59 7,51 17 5 63,27	- 3,87 - 0,82 - 1,94 - 5,84		+ ,41 + ,25 - ,68	41 30 24,85 59 53 23,89 37 21 49,81 44 20 34,08 44 35 27,73	+ 1,32 - 3,87 + 1,01 + 1,16		3,1 + 0,4
6177 6228 6238 6268 6360	2229 ol 111 2234 of 111 2234 of 1V 2101 of IV	1 2 1 1	17 32 51,99 17 41 33,95 17 42 43,28 17 48 23,16 18 0 48,09	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	+ ,21	- ,20 + ,16	45 57 34,70 34 44 54,94 34 50 59,40 36 0 28,54 36 48 7,06	+ 5,17 - 4,24 - 8,30 - 2,69 - 6,68		$ \begin{array}{c c} - & 1.3 \\ - & 1.2 \\ + & 5.4 \\ - & 1.8 \end{array} $
6382 6396 6542 6550 6585	2296 of III 2367 of III 2216 of II	1 2 2 1 3	18 12 2,76 18 14 17,26 18 47 55,76 18 49 37,96 18 58 34,93	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		+ ,37 - ,03 - ,11	36 44 12,11 53 42 42,42 37 18 32,76 58 8 16,07 38 8 42,75	+ 0,23 + 3,29 - 2,96 + 2,35 - 0,01		3,4 1,0
6612 6634 6914 698 <i>6</i> 6987	2598 of III	3 1 3 1	19 5 20,16 10 10 26,04 20 37 37,27 21 2 3,61 21 2 47,48	- 2,03 - 3,03 - 3,41 - 1,49 - 1,58 - 2,37		,51 ,14				+ 0,5 - 0,2
7171 7203 7252 7267 7274		3 3 6 3	22 35 46,57 23 1 16,37 23 8 3,19		1 + ,30 1 - ,24 1 + ,15	- ,29 + ,38 - ,26 + ,06	54 20 21,97 46 6 40,73 59 6 38,57 33 24 5,48	+ 2,72 + 8,98 + 3,78	$ \begin{array}{c c}  & -0.4 \\  & + 1.3 \\  & + 3.3 \\  & + 6.3 \end{array} $	70,2 + 0.8 - 0.6 + 3.6 + 0.8
	2938 of 111 2813 of 11	3	23 24 22,74 23 26 27,23 23 30 51,23	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{vmatrix} + & , 22 \\ - & , 28 \\ + & , 11 \\ + & , 28 \end{vmatrix}$	+ ,34 - ,49 - ,09 + ,21	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c c} + & 3.68 \\ + & 4.6 \\ + & 3.2 \\ + & 3.6 \\ \end{array} $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	+ 1.0 - 1.0 + 2.7 - 0.4

In examining these differences as well as those in the catalogue, it must be kept in mind that they are each affected by the amount of fifteen times the annual proper motion which may attach to the star under consideration; for the A. R., the effect of this circumstance is lost sight of—in the larger

clxxvi Remarks and Memoranda with regard to the foregoing Catalogue.

amounts of error of the Brisbano Catalogue, but with those for Declination,—it is probable that a great many of the large differences which are met with, may thus be explained: as the differences now stand, about one half of the whole number are less than three seconds, and about five sixths of the whole are below six seconds, or more correctly thus.

Difference below	3"	- 1632
Between	3 and 6"	1024
Above	6	535
Large Differences	·	46
Not observed by B.		218
	Total	3455

## ERROR OF DIVISION OF THE MADRAS MURAL CIRCLE.

In the earlier volumes of the Madras Observations, I have stated with regard to the Mural Circle—that the error of division of every fifth degree had been examined, when the largest error did not exceed two seconds. The method by which this examination had been conducted, was contrived for this express purpose and put in force in the year 1831, and the result of the examination of every 5°, was printed in the Journal of the Asiatic Society of Calcutta in the following year.\* In the Autumn of 1838, I availed myself of the assistance of Mr. Caldecott (the Astronomer at the Trivandrum Observatory,) to repeat these examinations, when the results although not near so satisfactory as the method itself under better arrangements is capable of,—still, will I hope be considered not altogether undeserving of credit.

The examination was conducted as follows. The telescope was unclamped from the circle, whoreby, turning on its own axis (which passes through the axis of the circle,) it could be pointed to any required position. The telescope was directed to the horizon, and the 5 feet telescope placed as a

<sup>•</sup> The paper was transmitted by me in the first instance to the Royal Society, but I have reason to believe that it never reached its destination.

<sup>†</sup> The long and now flekely wooden legs of the 5 foot telescope, do not permit us to expect that perfect immoveability which the successful prosecution of the plan requires, added to with a twelve inch telescope with an aperture of \$\frac{1}{2}\$ of an inch when used as a collimator—was not calculated to afford a sufficiently well defined mark for hisection.

collimator in front of it, whereby a pair of cross wires which had been fitted into the focus, were distinctly defined by the Mural Circle Telescope. The telescope was now turned through 90° nearly, to the zenith, when a twelve inch telescope was placed above—in front of it, so that a pair of cross wires which had been fitted into its focus, were similarly well defined by the Mural Circle Telescope. The circle was turned to 0° 0′ 0" for microscope A, and B was read off. The circle telescope was now brought to the horizon to view the cross wires of the 5 feet telescope, when it was clamped to the circle, and an accurate intersection of the horizontal moveable wire with the cross wires effected. This done—the circle was unclamped, and with its attached telescope moved through 90° to view tho zenith collimator, when the intersection of the cross wires with the before used moveable wire being made, the reading of the circle-compared with the former reading, gave once the exact angle between the two collimators. The circle remaining clamped, the telescope was released, and again brought to intersect the cross wires of the horizontal collimator, where it was clamped, and then with the attached circle moved again to the zenith collimator: here the reading was necessarily 1800 nearly, or twice the angle subtended by the two collimators, and proceeding in this way the divisions 00 and 180° were again arrived at, when four times this angle independent of error of division was necessarily obtained, and hence the true angle itself. If we now compare the true angle with that read off at the 90° we immediately obtain the error of division of the diameter\* 90°-270° as compared with 0° -180°; and if we successively double and treble the value found for the true angle, and compare these products with the readings of the circle at 180° and 270°, we similarly determine the errors of the diameters 180°-0° and 270°-90°, Thus

By reason of the facility with which an instrument necessarily turns upon its axis, the centre of the axis is in ne case fixed with respect to the microscopes; hence it follows with regard to any two opposite microscopes,—that the one will be read off in excess of the truth, whilst the other will be in defect to the same amount; and since this quantity is for ever varying, it becomes a matter next to impossible to free the readings at a single microscope from its effects, and thence determine the error of the division at which the reading may have been made; it happens fortunately however, that the error of a single division, is not that for which we see in search; what really is required, is, the error attaching to the several divisions we employ; thue, as a simple case; if the two herizontal microscopes alone he employed, we require to know the angle which a diameter from 0° to 180° makes with the diameter formed by the other two divisions we may employ. Does the diameter 90°—270° for lustance make an angle of 90° with the diameter 0°—180°? and does the diameter 0° 5′—180° 5′ make an angle of 6′ with the came? Any deviation from such conditions, must arise from error of division, and it is in search of this that we are new engaged.

Mensur tende	res of the	e angle	ators.	TIME	×	Diff. or	Measures of t	he an e colli	gle sub- nators,		Tr. ang	Diff, or error div.
A		В. М	lean.	angle.	1,2, &c.	error div,	Α.	В,	Mean.	angle.	1,2, &	
	17th	Septem	ber 18	38 at 4	P, M.				,	-		
	#	. 4 .	h		: # 1		0. 2 49 1	*	* -	1 1	*	, * '
90 0 90 0 180 0 270 0 360 0	0,0 0,6 6,2 10,2	31,2 34,2 40,2 42,4 46,6	15,60 17,40 23,20 26,30 32,00	90 0 4,10	15,60 19,70 23,80 27,00 32,00	2,30 0,60 1,60	0 0 0,0 90 0 0,8 180 0 6,5 270 0 10,9 360 0 17,7	34,6 36,0 41,8 46,4 50,0	17,30 18,40 24,15 28,65 33,85	90 0 4,14	17,30 21,44 25,58 29,72 33,85	- 3,04 - 1,43 - 1,07
0 0 90 0 180 0 270 0 360 0	21,4 27,6 27,3	46,6 53,0 57,2 50,6 4,0	32,00 37,20 42,40 43,45 48,55	4,1	32,00 36,14 40,28 44,42 48,55	+ 1,06 + 2,12 - 0,97	0 0 0,0 90 0 2,1 180 0 7,9 270 0 14,3 360 0 18,9	33,3 37,2 44,0 47,7 52,4	16,65 19,65 25,95 31,00 35,65	90 0 4,75	16,65 21,40 26,15 30,90 35,65	$\begin{array}{c c} - 1.75 \\ - 0.20 \\ + 0.10 \end{array}$
. ,	S	ptembe	r 18th	at 7 A	м,					1		
0 0 90 0 180 0 270 0 360	3,3 6,0 0 9,3	33,1 39,1 43,6 45,0 48,4	16,55 21,20 24,80 27,15 31,60	0 0 3,7	16,55 20,31 24,07 27,83 31,60	+ 0,89 + 0,73 - 0,68	* 0 0 0.0 90 0 55,6 180 0 50 5 270 0 45,9 360 0 42,1	34,0 31,1 28,0 22,1 18,0	13,35 9,25 4,00	1	17,00 12,76 8,52 4,28 0,05	+ 0,59 + 0,73 - 0,28
90 180 270 360	0 2,5 0 6,4 0 11,3	33,5 30,1 43,0 46,5 52,0	16,75 20,80 24,70 28,90 35,00	0 4,50	16,75 21,31 25,87 30,43 35,00	- 0,51 1,17 1,53	0 0 0,0 90 0 53,9 180 0 49,1 270 0 43,6 360 0 38,0	34,0 30,2 27,9 20,2 14,7	12,05 8,50 1,00	89 59 54,84	6,68 1,52 5 <b>6</b> ,35	$\begin{vmatrix} + & 0.21 \\ + & 1.82 \\ 2 & + & 0.38 \end{vmatrix}$
0 90 180 270	0 0,0 0 2,8 0 5,3	33,0 38,1 41,0 45,0	16,05 20,45 23,16 27,76 32,76	0 3,94	16,95 20,80 24,83	- 0,44 - 1,68 - 1,07	0 0 0,0 90 0 54,0 180 0 48,0 270 0 40,3 360 0 36,3	26,5 19,1	13,05 7,26 59,70	89 69 53,89		$\begin{vmatrix} + & 0.91 \\ 3 & + & 1.22 \\ 2 & - & 0.22 \end{vmatrix}$

I altered the position of the reflector of the horizontal telescope, which appears to have disturbed the angle.

If we now collect these several result and take the mean, we get as follows.

Error of the diameter joining the division 90° & 270°

0 0	0 0	0 0	. O. O
0 & 180	90 & 270	180 & 0	270 &90
		4	#
0,0	2,30		1,60
0,0	+1,06	+ 2,12	<b>— 0,</b> 07
. 0,0	+ 0,89	+ 0,73	0,68
0.0	0,51	1,17	1,53
0,0	0,44	<b>—</b> 1,68	1,07
0,0	- 3,04	1,43	1,07
0,0	1,75	j — 0,20	+ 0.10
0,0	+ 0,59	+ 0,73	j 0,28
0,0	+ 0,21	十 1,82	十 0,38
0,0	+ 0,91	+1,22	0,22
,,,,	<u> </u>	<u> </u>	<u> </u>
-0.0	0.438	+ 0.154	0,694

Mean of 10=0,0 - 0,438 + 0,154 - 0,694

Here it would appear that the diameter 0°—180° makes an angle of 180° 0′, 0″, 154 with the diameter 180°—0°, or with itself in fact!—or rather, this 0\*, 154 must be looked upon as error of observation, since the angle in question must be exactly 180°. With regard to the diameter 90°—270° or 270°—90° we have two measures, or we have already found as follows.

Diameters. 
$$\begin{cases} 0^{\circ}-180^{\circ} & 0'',000 \\ 90-270 & -0',566 \end{cases}$$
 Error of division.

I now placed a 46 inch achromatic telescope immediately above the horizontal collimator, so as to make an angle of 30° with it, and act as a collimator to the circle telescope, when the following repetitions of the measure of the angle subtended by them were made.

Measures tended b	of the a	ngle sub- imators.	True	X larmon din		X Annea din					True	tr. ang.	Diff. or error div.
A.	В.	Mean.	angle.	1,2, &c,	ettor utv.	A	•	В,	Mean.	angle,	1.2, &c.	C	
0 0 0 29 59 59 59 59 59 59 59 59 59 59 59 59 59	B.  181  0,0 34, 566,9 31, 187,4 23, 147,4 23, 144,1 18, 39,3 19, 29,0 7, 27,8 5, 23,2 0, 17,7 58, 16,4 55, 0,0 36, 56,6 32, 60,8 28, 60,8 28, 60,2 26, 48,7 49,4 45,8 26 45,0 22 44,5 21 43,4 41,6 17	17,15 14,00 10,15 1,45 1,45 1,45 1,45 1,45 1,45 1,45 1	9 59 58,73 29 59 58,33 29 59 56,07 29 59 57,02		- 0,17 - 1,04 - 0,65 + 0,18 - 0,79 - 2,32 - 3,05 - 0,77 - 1,85 - 1,67 - 1,67 - 1,50 - 3,88 - 3,31 - 0,83 - 2,06 - 1,50 - 1,48 - 2,46	0 0 0 0 29 59 59 59 59 59 59 59 59 59 59 59 59 59	0,0 57,9 51,9 51,9 49,4 48,2 44,3 45,9 42,1 42,0 42,8 0,0 55,2 55,2 654,8 654,7 647,8 647,8 646,5	34,4 33,2 31,2 29,1 26,7 23,6 26,5 26,1 24,3 22,5 21,1 18,5 17,0 34,1 34,0 31,7 27,0 30,0 24,8 22,4 21,0 19,5	7,720, 15,55 11,40 9,50 9,50 6,50 7,35 6,05 4,30 4,20 1,60 13,25 15,60 14,60 13,25 9,85 11,30 6,20 4,45 3,05 1,60	29 59 58,32 29 59 58,92 29 59 58,76 29 59 58,36	17,20 15,56 13,92 12,28 10,64 8,99 7,35 6,11 4,87 3,03 2,39 1,14 59,90 17,75 16,67 15,60 14,52 13,45 12,37 11,30 9,62 7,93 6,25 4,52 2,88 1,20	- 0,01 - 2,52 - 2,78 - 1,34 - 2,49 - 0,67 + 0,57 - 0,79 - 0,89 - 1,02 - 0,60 + 0,08 - 0,20 - 2,52 - 1,73 - 1,80 - 1,57 - 1,28	

Measures tended	of the ang	nators.   True		oiff, or ror div.	··	by the	collimat	tors.	True	tr. ang. × . 2, &c.	Diff. or error div.
59 59 89 59 119 69 149 59 179 59 209 59 239 59 269 59 329 59	47,4 23,9 45,9 26,4 42,1 25,3 41,1 21,8 38,8 18,9 37,4 17,0 34,6 13,2	19,20 17,40 13,50 12,85 8,80 5,65 6,15 3,70 1,46 58,85 57,20	19,20 17,02 14,85 12,67 10,60 8,32 6,15 4,21 2,27 0,33 58,39	- 0,38 - 1,35 - 0,18 - 1,70 - 2,67 - 0,51 - 0,82 - 1,48 - 1,19 - 2,54	0 0 29 59 59 59 89 59 119 59 149 59 149 59 209 59 239 59 299 59 359 59	0,0 58,8 57,1 57,0 57,7 58,8 56,4 65,9 57,8 57,8 55,9 554,7	7 37,7 1 36,4 1 35,1 1 36,0 1 36,4 1 36,8 1 36,5 1 36,8 3 36,4 36,2	16an. 8.85 7,60 6,10 6,55 6,70 16,75 19,30 17,40 16,20 17,30 16,15 16,45 18,05	29 59 59 79 30 0 0,07	18,85 18,92 19,00 19,07 19,15 19,22 19,30 19,09 18,88 18,67 18,47 18,26 18,05	- 1,32 - 2,90 - 2,52 - 2,45 - 2,47 - 1,69 - 2,68 - 1,37 - 2,32 - 2,81
90 0 120 8 149 5 180 2 210 230 5 269 5 299 5	19th 5 0,0   39, 0,8   36, 58,2   35, 0,9   37, 0,9   37, 0,9   39, 0,9   39, 0,	3eptember at  4 19,70 9 18,85 4 16,80 19,85 4 19,15 5 18,55 6 20,40 7 19,00 1 18,90 3 17,60 6,1 16,70		- 0,97 - 3,14 - 0,21 - 1,02 - 1,73 + 1,02 - 0,76 - 0,56 - 1,53 - 2,11	0 29 5 59 6 89 8 119 8 149 8 209 8 239 8 299 5	0 0,0 9 58,8 9 53,9 59 52,9 59 50,3 59 49,8 59 48,7 59 43,9 59 41,7	35,5 34,2 33,9 29.8 27,8 30,1 27,6 22,0 21,4 20,0 17,4	18,96 17,15 14,05 13,40 10,05 8,80 9,40 5,75 1,55 59,65 56,55		18,95 17,36 15,77 14,17 12,58 10,99 9,40 7,07 4,74 2,41 0,07 57,74 55,40	
0 30 59 89 120 150 180 209	0 0,0 37 0 1,9 37 59 59,3 37 59 69,9 36 0 0,6 36 0 0,0 36 0 0,0 36 59 59,0 3 0 0,8 3 0 0,9 4 0 0,8 3	,6 18,80 19,65 1,0 18,15 3,7 19,30	21,17	- 0.50 - 1.57	59 89 119 149 179 209 239 269 299	59 32, 59 29	35,4 31,3 7 28,6 4 25,7 3 23,6 9 23,6 3 21,7 7 16,1 9 12,3	4,16 3,26 0,56 57,96 56,49 52,60 49,7	0 7 0 0 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,22 11,48 8,73 5,99 3,20 0,89 58,5 56,1 53,8	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$

The above observations as well as those which follow, unless otherwise stated—were made by Mr. Caldecott at microscope A, and myself at microscope B: the bisections with the telescope were mostly made by myself. Arranging these under their respective divisions and taking the means we get—

Error of the diameter joining the divisions 30°--210°; 60°--240°&c.

Ì	30 & 210	0 0 · 60 & 240	0 ·0 90 & 2 <b>7</b> 0	0 0 120 & 300	150 & 330	210 & 30	0 0 240 & 60	270 & 90	300 & 120	330 & 150
	- 0,17 1,98 0,01 1,02 + 0,38 - 0,97 + 0,62 - 1,32 0,21 0,06	- 1,04 3,51 2,52 0,60 1,35 3,14 1,11 2,90 1,72 2,12	$\begin{array}{c} "\\ -\ 0,65\\ 3,80\\ 2,78\\ +\ 0,08\\ +\ 0,18\\ -\ 0,21\\ 0,20\\ 2,52\\ 0,77\\ 2,33 \end{array}$	+ 0,18 - 3,88 1,34 0,20 1,70 1,02 0,43 2,45 2,53 2,18	70,79 3,31 2,49 2,52 2,67 1,73 1,66 2,47 2,19 1,84	2,32 0,83 0,06 0,72 0,51 + 1,02 1,12 1,69 1,32 0,39	- 3,05 2,06 0,57 1,73 0,82 0,76 3,05 2,68 2,89 0,58	- 0,77 1,50 + 0,57 - 1,80 1,48 0,65 1,92 1,37 0,86 + 0,23	- 1,85 1,48 0,79 1,57 1,19 1,53 0,50 2,32 0,42 1,22	- 1,67 2,46 0,89 1,28 2,54 2,11 1,57 2,81 1,19 1,71

$$M_{\text{sun}} = 0.474 = 2.001 = 1.300 = 1.555 = 2.167 = 0.794 = 1.819 = 0.855 = -1.287 = -1.813$$

Here we observe as before, that the angles 30° & 210° and 210° & 30° &c. being measured upon the same divisions, we may take the means, thus.

I now lowered the upper telescope, so as—still remaining a collimator to the circle telescope, it might subtend an angle of 5° nearly with the lower or horizontal collimator, when the following measures of the angle subtended by them were made.

Measures of the		ators.	True	tr. ang. ×	Diff. er error div.	Measures of tended by the	the an	gle sub- ators.	True	tr. ang.	Dill. Of I
Λ.	В.	Mean	augle,	1.2, &c.		Α.	В.	Mean.	angle.	1.2, &c.	error div.
September 0 / # 0 0 0,0 5 0 1,2 10 0 3,0 15 0 8,3 20 0 9,5 25 0 13,7 30 0 17,8	40.4 42.4 43.3 47.0 52,4 56,4	20,20 21,80 23,60 27,65 30.95 35,05	5 0 2,92	20.20 23.13 26.05 28,97 31,89 34.81 37,73	- 1.33 2,45 1,32 0,94 + 0,24	0 0 0,0 5 0 2,9 10 0 6,3 15 0 10,7 20 0 15,3 25 0 17,9 30 0 22,2		31,40 36,00 39,45	5 0 3,55	20.40 23,95 27,49 31,04 34,59 38,13 41,68	- 1,95 0,99 (十 <sup>2</sup> 0,36 1,41 1,32

<sup>•</sup> This result from the Zenith collimator might have been dispensed with, but I have preferred giving it, in order to show the extent to which single result may be trusted.

Measures of t	he angle sub-	1	r. ang.	Diff or error div.	Measure tendéd	s of the	e angl	e sub- lators.	True augle	tr. ang × 1. 2, &c.	Diff. or error div.
	B. Mean	angle	, 2, &c.	error divi	<b>.</b>	- 1	В.	Mean.	augie		ellor divi
0 0 0,0 5 0 4,7 10 0 8,2 15 0 12,3 20 0 16,3 25 0 24,2 30 0 29,3	40,4 20,3 42,8 23,3 47,0 27,6 63,0 32,6 56,8 36,6 2,5 43,6 6,2 47,3	00 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	20,20 24,90 29,59 34,29 38,99 43,68 48,38	- 1,15 1,99 1,64 2,44 0,33	5 0 10 0 15 0 20 0 1	6,0 8,5 9,8 1,6	38.9 40.0 43.2 47.0 47.2 52,0 52,3	19,45 23,00 25,85 28,40 29,40 33,45 35,80	5.02,83	19,45 ,22,28 ,25,11 ,27,94 ,30,77 ,33,60 ,36,43	-1 0,72 0,74 0,46 -1,37 0,15
0 0 0,0 5 0 5,8 10 0 10,3 15 0 14,3 20 0 18,7 25 0 23.8 30 0 28,7	40,8 20, 44,7 25, 48,6 29, 53,6 33, 58,1 38, 2,2 43,	40 25 45 95 40 00	20,40 25,11 29,81 34,52 39,22 43,93 48,63	+ 0,14 - 0,36 0,57 0,82 0,93	20 0 25 0	0.0 3,2 5,3 10.6 12,6 14.6 18,0	39.0 39,2 42,9 48.9 50 6 52,4 53,7	19,50 21,20 24,10 29,75 31,60 33,50 35,85	5 0 2,83	19,50 22,33 25,16 27,99 30,82 33,65 36,48	- 1,13 1,06 4- 1,76 0,78 - 0,16
0 0 0,0 5 0 3,6 10 0 7,4 15 0 12,6 20 0 16,5 25 0 23,6 30 0 28,6	40.4 20, 41,6 22, 46,4 26 53,2 32 7 59,4 38 0 3,7 43	20	20,20 24,75 29,29 33,84 38,39 42,93 47,48	2,15 2,39 1,24 0,34	20 0 25 0	0,0 3,0 8,4 14,6 18,5 23,1 29,6	38,0 40,8 45,2 51,4 57,2 1,3 2,3	19.00 21,90 26.80 33,00 37,85 42,20 45,95	5 0 4,60	19,00 23,60 28,20 32.80 37,40 41,99 46,58	- 1,70 1,40 4- 0,20 0,45 0,21
0 0 0,1 15 0 4,1 0 0 5,	0   40.8   20 3   43.8   24	breakfast.	20,40 22,94 25,48	$\begin{vmatrix} + & 1,26 \\ - & 0,13 \end{vmatrix}$	0 0 5 0 10 0	4.4 6.4	37,0 38,0 44,7	21.20 25.55	5,09	18,50 23,59 28,68 33,77	- 2,39 3,13 2,17
15 0 9, 20 0 11, 25 0 12 30 0 16	8   49,0   29 1   52,6   31 8   54,4   3	,40 ,85 3,60 5,00	28,02	0.51	20 0	14,2 22,3		35,85 3   42,45	0 20	38.86	3,01 1,49

The above series as well as those which follow, exhibits that the angle subtended by the two collimators was by no means constant throughout; a circumstance however; which I have generally been able to account for:—either the light required trimming; or for some purpose or other some movement on the part of the observers took place.

I now commenced a series, between the division 30° and 60°; thus

y Commence	· · · · · · · · · · · · · · · · · · ·	4.2.7		i					
Measures of the angle tended by the collinat	sub-True	tr. ang.	Diff. or	Messures of t	he ang e collir	[ .	Te. ang.	Diff, or error div.	
A. B. N	Aean. angle.	, 2, &c.	error div.	Α.	В.	Mean	angle.	1. 2, 60.	enor arri
30 0 0,0 37,3 35 0 1,0 41,1	18,65 21,05 22,30 25,85 28,36 30,05 32,85	19,28 21,86 24,44 27,02 29,60	2,14 1,17 1,25 2,13	30 0 0,0 35 0 0,2 40 0 3,7 45 0 7,9 50 0 9,9 55 0 10,4 60 0 12,2	39,3 42,0 44,1 47,1 50,2 53,0 52,7	19,65 21,10 23,90 27,50 30,05 31,70 32,45	5 0 2,35	20,28 22,63 24,97 27,32 29,67 32,01 34,36	- 1,53 1,07 + 0,18 0.38 - 0,31

Measures of the angle sub- tended by the collimators.	True tr. ang.	Diff. or	Measures of the angle sub- tended by the collimators. True tr. ang. Diff. or
A. B. Meun.	angle 1, 2, &c.	error div.	A. B. Mean. angle 1, 2, &c. orror div.
30 0 0,0 37,7 18,85 35 0 0,7 41,0 20,85 40 0 2,2 43,4 22,80 45 0 7,9 46,0 26,95 50 0 9,3 49,8 29,55 55 0 11,0 62,7 31,85 60 0 14,3 52,0 33,15	19,48 22,08 24,67 27,27 29,87 32,46 35,06	1,23 1,87 0,32 0,32 0,61	40 0 4,2 45,8 25,00 5 25,62 0,62
30 0 0,0 37,9 18,95 35 0 0,9 40,7 20,80 40 0 2,9 43,1 23,00 45 0 7,8 45,0 26,40 50 0 9,1 48,3 28,70 55 0 10,4 51,0 30,70 60 0 13,7 52,0 32,85	19,58 22,11 24,64 27,17 29,70 32,23 34,76	- 1.31 1.64 0,77 1,00 1-1,53	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
•			September 21st at 7 A. M.
30 0 0,0 38,7 19,36 35 0 1,0 41,1 21,05 40 0 3,2 42,9 23,05 45 0 7,3 46,1 26,70 50 0 7,9 47,5 27,70 55 0 9,7 51,4 30,55 60 0 3,2 51,9 32,55	19,98 22,30 24,81 27,22 29,63 32,05 34,46	- 1,34 1,76 0,52 1,03 1,50	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
30 0 0,0 38,6 19,30 35 0 1,0 41,4 21,20 40 0 3,8 44,2 24,00 45 0 8,8 46,6 27,70 50 0 9,4 50,0 29,70 55 0 10,8 52,4 31,60 60 0 14,9 53,3 34,10	89 10,93 22,61 25,29 27,97 30,65 33,33 36,01	- 1,41 1,29 0,27 0,95 1,73	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
30 0 0,0 88,0 10,00 35 0 0,8 41,4 21,10 40 0 4,1 44,9 24,50 45 0 8,1 46,4 27,25 50 0 9,8 50,9 30,35 55 0 12,0 52.0 32,46 60 0 16,0 54,0 35,00	88 22,51 22,51 25,39 28,27 91,15 34,03 36,91	1,41 0,89 1,02 0,80 1,58	60, 0     0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0
		·	We went to breakfast, leaving my two assistants Baboo Naick and Sashoo to continue the series, thus.
30 0 0,0   38,9   19,45   35 0 1,0   42,0   21,50   40 0 4,3   45,7   25,00   48,8   29,35   50 0 11,0   52,1   31,55   55 0 12,0   53,1   32,55   60 0 15,6   53,4   34,50	20,08 22,80 25,53 28,25 30,97 33,69 36,41	- 1,30 0,53 + 1,10 + 0,58 - 1,14	60 0 0,0 41,1 20,55 26,66 28,25 1,00 12,2 52,2 32,20 1,85 34,05 1,85 75 0 18,2 58,0 38,10 80 0 24,7 5,66 45,15 85 0 30,3 10,7 50,50 90 0 36,0 16,8 56,40 20,56

Measures of the		ors.		x. I	Diff. or	Measures of the tended by the			TIUC :	tr, ang,	Diff. or
Λ.	В. М	lean. an	gle 1,2	, &c.	error. div-	Λ.	в.  1	Mean.	angle	1,2, &c.	error div.
60 0 0,0 65 0 7,0 70 0 11,9 76 0 19,2 80 0 24,9 85 0 30,1 90 0 34,2 60 0 0,0 65 0 5,8 70 0 12,4 75 0 18,7 80 0 23,0 85 0 29,2 90 0 34,2 60 0 0,0 65 0 4,0 70 0 9,8 75 0 16,7 80 0 21,9 85 0 28,8 90 0 32,6	48,0 52,1 58,3 5,1 10,2 16,2 41,3 48,2 52,6 58,3 5,0 10,0 15,8 40,6 47,0 49,2 57,0 4,3	20,65 27,00 38,75 45,00 50,15 20,65 27,00 38,50 44,00 49,60 55,00 20,30 25,50 29,50 36,85 43,10	50 5,45 5 0 5,54 5 0 5,65 5 0 5,65 5 5 0 5,65 5 5 0 5,54 5 5 0 5,54 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2,10 7,80 3,45 3,45 3,45 3,45 3,45 3,45 3,45 3,45	3,61 1,72 0,92 0,37	70 0 13,6 75 0 21,6 80 0 27,6 85 0 36,1 90 0 43,7 60 0 0,0 65 0 5,1 70 0 12,4 75 0 21,4 80 0 27,8	41,2 47,5 53,5 1,0 9,0 14,8 23,3 43,2 48,6 53,3 2,0 10,4 17,4 21,9 41,7 47,5 52,8 0,6 8,7 14,2 21,2	56.76 62,80 20,80 26,30 32,60 41.00 48,20 54.90	5 0 6,53 5 0 6,68 5 0 6,86	22,51 29,37 36,23 43,09 49,95 56,81 63,07 23,51 30,19 36,88 43,56 50,25 56,93 63,62 22,76 29,29 35,83 42,36 48,90 55,43 61,97	- 2,82 3,38 2,59 1,50 1,66 - 2,94 3,43 1,76 1,25 0,18 - 2,99 3,23 1,36 0,62 0,48

The above observations appearing consistent, and being otherwise engaged (in a series of magnetic observations,) the same two assistants were allowed to proceed with the series of measures on the divisions 90°—120°; as follows.

Bould - London	12	<b>V</b>		
90 0 0,0 42,0 95 0 8,0 49,0 100 0 13,0 57,0 105 0 21,4 2,0 110 0 27,3 11,0 115 0 34,0 15,0 120 0 42,6 21,0	6 28,80 29 0 35,00 29 1 41,75 42 0 49,15 0 49 2 54,60 56	,32 1,17 3,02 1,02 1,02 1,12 0,72 0,57 1,97 1,97	90 0 0,0 43,2 21,60 29,35 29,35 29,35 36,20 43,10 27,9 115 0 34,5 120 0 42,2 22,5 62,35 29,35 27,6	+ 0,04 - 0,30 1,25 0,74 1,68
90 0 0,0 42, 95 0 8,8 47, 100 0 15,0 53, 105 0 23,5 0	1 27,95 28 7 34,35 2 6 35 4 41,95 42 3 48,65 0 49 2 55,10 56	,82 3,68 5,64 2,41 0,46 0,63 3,15 3,02 ,05	90 0 0,0 42,2 21,10 29,01 95 0 8,7 49,2 28,95 29,01 100 0 15,0 58,5 37,05 5 30,10 105 0 23,0 3,2 43,10 643,19 110 0 29,7 10,9 50,30 115 0 35,6 16,5 56,05 120 0 43,0 23,1 63,05 57,38	- 0,06 + 0,95 - 0,09 + 0,01 - 1,33
90 0 0,0 42 95 0 5,4 50 100 0 12,0 59 105 0 20,0 4 110 0 26,9 10 115 0 33,0 18	0 27,70 6 28 2 35,60 6 36 0 42,00 42 4 48,65 0 48 3 64,15 6 5	2,07 8,99 5,92 2,84 9,77 6,69 2,54	90 0 0,0 43,3 21,65 95 0 9,6 50,2 29,90 57 29,78 100 0 15,9 63.4 37,15 105 0 24,3 4,0 44,15 110 0 30,3 11,3 50,80 51,70 115 0 37,3 17,4 57,35 50 59,01 120 0 45,2 24,6 64,90 66,32	1,66
90 0 0.0 4 95 0 10,4 5 100 0 15,0 5 105 0 24,0 1 110 0 29,9 1 115 0 33,1 1	0,0 30,20 8 2 0,2 37,10 5 3 4.0 44,00 4 0,4 50,15 0 4 5,3 54,20 8	$egin{array}{c} (2.32) \\ (9.24) \\ (6.16) \\ (13.07) \\ (49.99) \\ (56.90) \\ (63.82) \\ \end{array} + egin{array}{c} (0.86) \\ (0.94) \\ (0.93) \\ (0.16) \\ (0.93) \\ (0.16) \\ (0.93) \\ (0.16) \\ (0.93) \\ (0.16) \\ (0.93) \\ (0.16) \\ (0.93) \\ (0.16) \\ (0.93) \\ (0.16) \\ (0.93) \\ (0.16) \\ (0.93) \\ (0.16) \\ (0.93) \\ (0.16) \\ (0.93) \\ (0.16) \\ (0.93) \\ (0.16) \\ (0.93) \\ (0.16) \\ (0.93)$	90 0 0,0 43,0 21,50 5 22,32 95 0 9,0 50,4 29,70 5 36,27 100 0 14.7 58,3 36,50 5 36,27 105 0 22,6 3,6 43,10 50,22 110 0 29,4 10,1 49,75 50,22 115 0 36,1 16,4 56,25 57 19 120 0 43,0 22,5 02,75 64,17	+ 0,41 + 0,23 - 0.14 0,47 0,94

Mensures of the angle sub- tended by the collimators.	True Tr. ang. Diff or error div.	Measures of the angle sub- tended by the collimators. True tr. ang Diff. o
A. B. Mean	angie 1, 2, &C	A. B. Mean. angle 1, 2, &c. error di
90 0 0,0 43,0 21,60 95 0 8,4 48,6 28,60 100 0 14,0 57,0 35,50 106 0 22,6 3,0 42,80 110 0 29,8 9,9 49,85 115 0 35,0 15,7 55,35 120 0 42,6 22,7 62,60	\$\begin{array}{cccccccccccccccccccccccccccccccccccc	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
September 22nd at 7 A. M. commenced the measures on di	Mr. Caldicot and myself visions 1200—1500 thus.	
130 0 32,1 12,5 52,30 135 0 46,1 26,0 6,05 140 1 0,8 40,5 20,65	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	120 0 0,0   40,3   20,18   75     21,57   86,81   -1,21       126 0 15,3   55.9   35,80   -1,21     55,96   52,08   52,08   -1,21       130 0 31,6   10,2   50,90   -1,35   0,30   -1,35   0,44   -1,21     1,16   52,08   -1,16   7,30   -2,95   3,70       140 0 59,8   37,9   18,85   145 1 17,6   57,2   37,40   -1,50   150 1 31,3   10,8   51,05   -1,50   53,04   -1,39
120 0 0,0 41,6 20,80 125 0 15,3 56,3 35,80 130 0 29,7 10,0 49,85 136 0 44,0 23,2 3,60 140 0 58,7 36,9 17,80 145 0 13,0 54,7 33,85 150 0 26,2 6,4 46,30	22,22 36,56 50,91 5,25 19,60 1,80 1,80 33,94 0,09	120 0 0,0     40,8     20,40     3     21,82       125 0 15,7     56,3     36,00     36,96     52,09     1,39       130 0 31,0     10,4     50,70     7,28     2,73       135 0 44,9     24,1     4,50     7,28     2,73       140 1 0,6     38,0     19,30     23,37     3,07       145 1 16,7     56,9     36,80     52,84     67,50     0,70       150 1 31,0     10,3     50,65     52,84     62,84
		We went to breakfast, after which I diminished the angle.
120 0 0,0 42,0 21,00 125 0 14,8 56,9 35,35 130 0 30,7 10,5 50,60 135 0 44,8 24,4 64,60 140 0 89,6 38,9 19,25 145 1 14,8 55,0 34,90 150 1 28,9 8,9 48,90	7 22,42 7 37,16 51,91 6,65 21,40 2,15 36,14 50,89	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
120 0 0,0 42,2 21,10 125 0 17,0 58,2 37,60 130 0 31,8 11,1 51,45 140 0 59,7 38,7 19,20 145 1 14,8 56,4 36,10 150 1 28,2 7,9 48,05	50 22,52 37,11 + 0,49 51,69 - 0,24 6,28 1,93 20,87 1,67 36,45 0,35 50,04	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
120 0 0,0 41,3 20,65 125 0 18,4 56,1 88,25 130 0 32,1 12,4 52,25 135 0 45.8 25,9 5,85 140 0 59,7 39,7 19,70 145 1 19,0 0,0 39,50 150 1 34,0 13,1 53,65	22,07 37,65 53,23 0,98 8,80 24,38 0,46 39,96 55,54	120 0 0,0 45.3 22,65 33,10 24,07 33,17 - 0,07 130 0 20,4 5,0 42,70 135 0 27,8 13,2 50,50 140 0 37,4 20,2 68,80 145 0 47,3 31,0 9,15 9,59 160 0 54,4 60,0 167,70 1 18,69 1

clxxxvi Error of Division of the Madras Mural Circle.

After which we proceeded to measure the same angle upon the divisions 150° and 180° thus.

Measures of the	re augle collima	sub-	True	r, ang.	Diff. or	Meusur tended	es of the	he angl e collin	ators.		Tr. ang.	Diff. or
Α.	В.		angle.	, 2, &c.	error div.	A		В,	Mean	angle.	1,2,60.	error div.
150 0 0.0 155 0 11.0 160 0 18.3 165 0 28.1 170 0 38.2 175 0 48.2 180 0 57.3	3,5 11,5 22,6 31,8	20,95 32,00 40,90 49,80 0,40 10,00 18,35	5 0 9,23	22,94 32,17 41,41 50,64 59,88 9,11 18,35	- 0,17 0,51 0,84 + 0,52 + 0,89	165 170 176	0 0,0 0 9,7 0 15,0 0 23,0 0 32,0 0 39,3 0 44,8	14,7 22,8	45,30 53,35 1,05	5 0 7,37	23,19 30,58 37,93 45,29 52,66 0,03 7,40	- 0,01 - 0,93 + 0,01 + 0,69 + 1,02
150 0 0.0 155 0 8,6 160 0 17,1 165 0 26,8 170 0 35,6 175 0 46,5 180 0 55,4	53,0 0.9 11,2 21,5 2 33,0	49.00 58,55 9,60	5 0 9,13	23,09 32,22 41,34 50,47 59.60 8,72 17,85	- 1,42 2,34 1,47 1,05 + 0,88	165 170 175		52,2 59,4 8,4 15,6 24,2	30.65 38,10 46,00 53,90 2,05	5 0 7,31	7,30	- 0.10 + 0.03 + 0.63 + 1.25 + 2.06
150 0 0, 155 0 10, 160 0 18, 165 0 26, 170 0 37, 175 0 46, 180 0 53,	7   50,3 0   1,0 9   9,4 4   18,3 2   29,2	30,50 39,50 48,15 57,85 7,70	5 0 8,67	22,94 31,61 40,28 48.94 57,61 6,28 14,95	- 1,11 0,78 0,79 + 0,24 + 1,42	165 170 175		52,0 59,0 8,5 0 14,0 2 19,0	30,46 37,06 2 45,60 8 53,40 9 58,00	5 0 6,88	43,99 50,88	$\begin{vmatrix} + & 0.25 \\ - & 0.00 \\ + & 1.6 \\ + & 2.5 \\ + & 0.2 \end{vmatrix}$
150 0 0; 155 0 12; 160 0 18; 165 0 27; 170 0 38; 175 0 47; 180 0 55	0 42,6 0 52,6 8 1,5 7 10,6 8 19,6	3 32,15 2 40,00 0 48,85 4 59,16 7 8,20	5 0 8,93	23,14 32,07 41,01 49,94 58,88 7,81 16,75	+ 0,27	160 165 170 175	0 0, 0 8, 0 15, 0 22, 0 31, 0 39 0 43	9 51, 3 58, 0 7, 2 14, 1 23	6 30,2 0 36,6 3 44,6 0 52,6 3 1,2	5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	58,82 5,96	- 0,0 - 0,1 + 0,1 + 0,1 + 2,
150 0 0 155 0 11 160 0 19 165 0 28 170 0 38 175 0 48 180 0 56	0 41, 3 51, 1 1, 2 10, 2 18, 2 29.	9 31,60 8 40.46 7 49,46 8 58,50 3 8,7		40,76	0,2/ 0,3 0,2/ 0,1/ 1 + 1,1	1 158 7 168 8 170 1 178	5 0 8 9 0 15 5 0 22 9 0 31 5 0 37 9 0 43	6 7 6 14 8 22 4 27	,7 30,2 ,6 36,4 ,0 44,8 ,0 52,8 ,2 0,6 ,2 5,8	25 = 3 45 30 = 3 30 = 3	5,3	3   - 0, 3   - 1, 7   + 0, + 1, 6   + 1,
			1	r	3	Th	e above	, by m	y assista	nts, B	aboo Nail	tand Sash

If we now arrange these several errors in a tabular shape, and refering to the Journal of the Asiatic Society of Bengal (May 1833) for the observations already alluded to as having been made in 1832, we shall no doubt get a tolerably near approximation to the truth.

The above—with two or three exceptions, was the extent to which the examination had gone up to the end of the present year (1839), when, the continued irregularities in the observations of the Sun, and the fact—that several stars whose places had been carefully observed here, differed to the amount of 4 or 5 seconds from the Greenwich or Cambridge observations,—these circumstances together, induced me to examine in a similar manner the errors of each single degree: for this purpose, two pairs of cross wires were fitted into the focus of the five feet telescope; but as these could not be separated to the full extent (one degree.) I was compelled to employ the fixed horizontal wire of the circle telescope at one of the crosses, and the moveable wire of the same at the other, when the following measures were made.

Error of Division of the Madras Mural Circle.

## Error of Division of each degree of the Madras Mural Circle.

	No.	Rea a Micro		Mic.	Mean	True Z	5 8	Diff. or	Observer	No		8	ding at os. A	- 1	Mic. B.	Mean,	True Z	₽. <b>0</b>	Diff. or or	Obser- ver.
	1 2 3 4 5	0 0	0,0 59,9 69,6 59,6 59,6 10,1	3,0		1 0 2,25	1,10 3,36 5,61 7,86 10,11 12,36	7,00 -3,06 4,56 7,21 7,01 0,81	T. & S.		1 2 3 4	10		2 9 8 ,8	4,0 1,8 3,5 4,1 7,3 17,7	2,00 0,40 1,70 2,45 6,55 14,75	0 , 0 1 1 0 2.57	2,81 5,38 7,95 10,51 13,08 15,64	-0,81 4,98 6,26 8,06 7,53 0,89	T. & S
	1 2 3 4 5		0 0,0 58,9 58,7 58,1 1,7	)   1,9 / 0,9   2,4 / 4,0	0,40 59,80 0,25 2,85	1 0 2,53	1,60 4,14 6,67 9,20 11,73 14,26	0,00 -3,74 6,87 8,95 8,88 0,81			1 2 3 4 5		6	,0 ,0 ,4 ,4	6,7 6,5 9,3 10,5 16,9 25,1	3,35 4,25 7,65 8,95 14,15 23,35	1 0 4,02	4,16 8,18 12,20 16,21 20,23 24,24	-0,81 3,93 4,55 7,26 6 08 0,89	
	1 2 3 4 5	5	0 0,6 58,6 59, 57, 2, 0 9,	9   1,0 2   3,0 4   3,0 0   4,0	6   0,25 4   1,30 2   0,30 4   3,20	. 0	5,85 7,82 9,79	0,00 -3,63 4,55 7,52 6,59 0,81			1 2 3 4	10 15	<i>5</i> 8 3	0,0 3,4 3,7 5,8 1,1 3,8	7,2 6,4 10,4 12,2 18,5 29,0	3,60 2,40 7,05 9,00 14,80 26,40	1 0 4,39	13,28	-0,89 6,48 6,23 8,67 7,27 0,07	
The state of the s	1 2 3 4 5		0 0, 59. 0, 0, 3, 0 10,	6   3, 6   5, 7   4, 7   7,	5 1,55 5 3,05 6 2,65 3 5,50	0 2	6.77 9,05	0,00 -2,94 3,72 6,40 5,83 0,81			1 2 3 4 5	10	· · · · · · · · · · · · · · · · · · ·	0,0 0,4 2,9 5,0 8,8 0.0	5,0 8,0 10,0 11,9 16,2 25,9	2,50 4,20 6,45 8,45 12,50 22,95		11,25	6,60	
	1 2 3 4	1,000	0 0 58 0 58 3 ~0 10	1 3 1 4 5 3 0 8	5   0.98 3   2.20 8   1,16 0   5,50		4,94 7,22 9,60	0,00 -3,99 5,09 8,30 6,28	2		1 2 3 4 5	10	1	0,0 0,7 5,1 7,0 3,0	6.8 5.6 11,7 13,2 20,5 30,5		, ,	18.06 22.64	5,73 5,07 7,51 5,89	
北海川 全きょうけい		2 3 4 5	0 3 0 11	1,4   3 1,5   4 1,3   4 1,7   9 1,7   18	3,00 3,0 1,4 2,3 2,6 1,1 6,4 1,1 14,9	5   • 5	8,61	4,76 6,3 8,40 7,00			1 2 3 4 5	10 15		0,0 0.8 3,7 5,0 12,2	6,5 7,5 10,0 11,6 18,0 28,0	4,15 6,85 8,30 15,10	, ,	12,65 16,90 21,16	4,23 5,80 8,60 6 6,06	3
		1 6 1 2 3 4 5 110	0	) 4	,5 2,7 ,5 1,9 ,0 4,4 ,4 5,3 ),6 9,1	5 0 0 0	0,00	7 4,0 3 3,9 5 5,4 9 4,0	2 8 9 9		1 2 3 4 5	10		0,0 59,8 3,9 3,2 6,6 17,5	5,6 5,9 9,2 10,5 14,0 23,5	2,8 <i>5</i> 6, <i>55</i> 6,8 <i>5</i> 10,30	, ,	17,11	4   4,19 0   3,86 5   6,90 1   6,80	) 5 1
The state of the s	A CONTRACTOR OF THE PROPERTY O	12345		9.7 2.3 1.2 6.5	3 3 3 5 5,4 3 5 6 7 3	6 0 6 9 6 30 8 26	3,66 6,36 9,0 11,7 14,4	6 4,8 5 5,2 5 7,8 4 7,1	6 0 0 4	350	1 2 3 4 5	15	0 9	0,0 0,8 4,8 6,2 12,8 22,9	6.0 9,3 11,1 12,9 19,4 29,0	5 0 6 7,95 0 0,55 1 16,10		25,9°	$ \begin{array}{c cccc} 5 & 2,60 \\ 3 & 4,23 \\ 1 & 7,20 \\ 9 & 5,23 \end{array} $	0 8 8 9

No.		eading at cros. A.	Mio.	Mean.	True Z	Corrected Mean.	Diff. or	Observer.	No.	[	eading at cros. A.	Mio. B.	Mean.	True Z	Corrected Mean.	Diff. or err. div,	Obser- ver.
1 2 3 4 5	20 20	0 22.9 12.7 8,0 5,3 2,9 0 2,7	29,0 19,5 13,2 10,9 8,9 7,6	25,95 16,10 10,60 8,10 5,90 5,15	1 0 4,15	25,97 21,82 17,67 13,52 9,37 5,22	-6,02 5,72 7,07 5,42 3,47 0,07	T. & S.	1 2 3 4 5	2 <i>5</i> 3 <i>6</i>	6 0,0 0,0 2,7 6,0 11,9 6 24,2	5,0 5,0 9,5 12,1 16,5 26,5	2,50 2,50 6,10 9,05 14,20 25,35	1 0 4.72	2,21 6,93 11,65 16,36 21,08 25,79	+6,29 -4,43 5,55 7,31 6,88 0,44	T. & S.
1 2 3 4 5	1 <i>5</i>	0 0,0 0,3 1,2 3,7 7,8 0 16,8	5,2 6,3 7,3 9,8 13,9 24,3	2.60 3,30 4,25 6,76 10,85 20,55	1 0 3,58	2.67 6,26 9,83 13,41 16,99 20,57	-6,07 2,95 5,58 6,66 6,14 0,02		1 2 3 4 5	25 30	0 0,0 58,9 2.3 3.7 10,0 0 21,6	6,2 5,8 9,0 10,2 15,2 24,2	3,16 2,35 5,65 6,95 12,60 22,85	1 0 4,10	2,81 6,91 11,00 15,10 19,10 23,29	+0,29 -4,56 5,35 8,15 6,59 0,44	
1 2 3 4 5	1 <i>5</i>	0 0,0 0,0 1,6 3,5 10,1 0 19,0	6,4 6,0 7,7 9,8 18,0 27,2	3,20 3,00 4,65 6,65 14,05 23,55	.1 0 4.06	3,27 7,33 11,39 16,45 19,51 23,57	-0.07 4,33 6,74 8,80 5.46 0,02		1 2 3 4 5	25 30	6 0,0 0,2 2,1 2,3 7,8 6 19,8	7,4 7,5 8,4 9,7 13,9 23,0	3,70 3,85 5,25 6,00 10,85 21,46	1 0 3,69	3,41 7,10 16,79 14,47 18,16 21,84	+6,29 -3,25 5,54 8,47 7,31 6,44	·
1 2 3 4 5	20	0 19,9 10,5 4,1 3,0 50,2 50 58,7	6,0	33,55 14,10 7,35 5,70 2,60 1,55	1 0 4,39	23.57 19,18 14,79 10,40 6,01 1,62	-0,02 5,08 7,44 4,70 3,41 0,07		1 2 3 4 5	2 <i>5</i>	6 6,0 0,4 1,9 1,5 6,8 0 18,8	7,9 6,9 8,3 7,0 12,1 21,1	3,95 3,65 5,10 4,25 9,45 19,95	0 ' " 1 '0 3,35	3,66 7,6,1 10,36 13,71 17,05 26,39	+0,29 -3,36 5,26 0,46 7,60 0,44	4
1 2 3 4 5	20	0 0,0 60,2 1,2 4,2 11,9 0 22,1	5,5 7,2 11,0 18,2	3,20 2,35 4,20 7,60 15,05 24,75	0 / "	11,72	-0,02 5,12 7,52 8,37 5,17 +0,20		1 2 3 4 5	25 30	0 0,0 1,3 5,0 7,1 10,5 0 20,4	7,1 7,9 11,5 12,0 15,9 22,1	3,55 4,60 8,25 10,00 13,20 21,25	, , , I 0 3,69	3,26 6,95 10,64 14,32 18,01 21,69	+ 0,29 -2,35 2.39 4,32 4.81 0,44	
1 2 3 4 5	1	0 0,0 1,0 4,8 7,2 13,0 0 23,3	7,6 12,2 14,0 20,0	3,50 4,30 8,50 10,60 16,50 25,80		12,32	-0.02 3,62 3,82 6,12 4,62 +0,29		1 2 3 4 5	35	0 0,0 59,0 1,2 59,2 1,8 6 9,0	3,3 3,0 4,4 4,8 6,8 16,5	1,65 1.00 2,80 2,00 4,30 12,75	1 0 2,32	2,09 4,41 6,73 9,06 11,38 13,76	7,06 7,08 6,08	B, & S
1 2 3 4 5		0,8 5,8 6,8 13,3	8,1 11,0 12,0 19,2		, , ,	11.88	3,48 6,86 4,49		1 2 3 4 5	30	6 0.0 58,2 59,2 59,2 3,3 0 10,8	2,8 1,4 3,2 4,0 8,7 17,1	1,40 59,80 1,20 1,60 6,00 13,96	1 0 2,61	1,84 4,45 7,00 0,68 12,29 14,90	-0,44 4,66 5,86 8,08 6,29 0,95	
1 2 3 4 5		1,1 4,9 3,9 11,9	7,2 2   11,0 2   11,2 2   17,6	4,15 7,60 7,20 14,40	0 , 0	11,11	3,51 8,08	1	1 2 3 4 5	30 35	6 0.0 58.6 1.3 0.2 3.2 6 8,8	3,9 2,2 4,9 6,1 8,3 15,9	1,46 0,40 3,10 3,15 5,75 12,85	1 0 2,28	1,89 4,17 6 45 8 74 11,02 13,36	-0.44 3,77 3.36 5,60 5,27 0,95	· 加州
1 2 3 4 5		59,5 3,5 5,0 11,3	7   5,6 7   8,2 9   11,2 3   16,1	2.5 5.5 8,10 13.70	0 4	11,66	4,54 5,71 8,03 6,90		1 2 3 4 6	30 35	0 0,0 0,2 0,2 0,0 3,2 0 10,8	3,4 3,9 4,9 6,3 9,1 16,6	1,70 2,65 2,55 3,15 6,15 13,65	1 = 0 2.49	9.62 12.11 14.60	-0,44 9,58 4,57 6,47 6,96 0,95	Leaves FE

No.	Reading at Micros.	.   .	Iic.	Mean.	True Z	Corrected Mean.	Diff. or err. div.	Obser- ver.	No.		Read at licro	-	В.	Mean.	True Z	Corrected Mean.	Diff. or err. div.	Observer.
1 2 3 4 5	5 t	0,0 8,6 1,7 9,6	2,9 2,1 4,4 5,3 9,4 7,4	1,46 0,35 3,05 2,45 6,90 14,15		1,89 4,53 7,17 9.82 12,46 15,10	-0,44 4,18 4,12 7,37 5,56 0,95	B. &S.	1 2 3 4 5	4(	0	0,0 2,0 5,9 7,9 12,7 ) 22,7	7,3 5,4 10,4 12,2 16,5 25,5	3,65 3,70 8,15 10,05 14,60 24,10	1 0 3,97	4,44 8,41 12,38 16,36 20,32 24,29	-0,79 4,71 4,23 6,30 5,72 0,19	r. & B.
1 2 3 4 5	1	2,3 3,9 1 3,3 8,8		4,65 5,85 7,36 6,45 12,10 20,35	. 0	5,60 8,71 11,82 14,92 18,03 21,14	-0.95 2,86 4,47 8,47 5,93 0,79		1 2 3 4 5	4		0,0 0,2 4,1 4,3 11,3 22,6	5,0 3,9 7,2 9,8 15,9 25,1	2,50 2.05 5,65 7,05 13,60 23,85	1 0 4,15	7,44 11,59 15,74 119,89	0,79 5,39 5,94 8.69 6,29 0,19	
1 2 3 4 5		$\begin{array}{c cccc} 2.9 & 1 \\ 7,1 & 1 \end{array}$	7,8 7,5 10,7 10.0 14.0 21,7	3,90 3,90 6,55 6,45 10,65 19,10	0 / " 1 1 0 3,01	4,85 7,86 10,87 13,87 16,88 19,89	-0,96 3,96 4,32 7,42 6,33 0,79		1 2 3 4 5	Ì	б ( 0	0 0,0 0,0 2,5 2,0 8,7 0 17,9	5,3 6,7 10,2 8,8 16,0 24,0	2,65 2,85 6,35 5,40 12,35 20,95	1 0. 3.70	6,54 10,25 13,95	-0,19 3,69 3,90 8,55 5,31 0,41	B. & S.
1 2 3 4 5			7,4 6,3 6,8 6,9 11,3	3,70 2,75 2,85 3,30 8,16 16,16	0 ' " 1 0 2.46	4,65 7,11 9,57 12,02 14,48 16,94	0,95 4,36 6,72 8,72 6,33 0,79		1 2 3 4 5			0 0,0 57,2 2,2 3,0 7,6 0 17,1	3,3 3,8 7,0 11,1 16,0 24,5	1,65 0,50 4,60 7.05 11,80 20,80	0 / 4	9,59	5,21 4,99 6,41 5,54	
1 2 3 4 5	1 1 h		9,9 8,2 9,0 8,7 12,4 20,9	4,95 4,60 5,35 5,40 8,85 18,00	1 0 2,58	5,90 8,48 11,06 13,63 16,21 18,79	-0,95 3,88 5,71 8,23 7,36 0,79	,	1 2 3 4			0 0,0 58,2 2,4 2,3 8,3 0 18,2	3,8 4,8 7,3 9,6 10,5 25,0	1,90 1,50 4,85 6,95 12,40 21,60	4 / 0	10,06 14,04 18.03	4,57 5,21 8,09 5,63	
1 2 3 4 6			7,5 6,6 6,9 6,1 11,0	3,75 2,90 3,55 2,50 7,40 16,05	1 0 2,43	4,70 7,13 9,56 11.98 14,41 16,84	-0,95 4,23 6,01 9,48 7,61 0,79		1 2 3 4 6	3	15 50	0 0,0 59,2 2,4 3,2 9,8 0 21,3	6.0	2,45 2,60 5,35 6,00 13,60 24,26		11,46	4,44 6,10 9,85 6,66	
	40 0 2 2 4 6 45 0	0,0 59,7 3,2 4,6 9,4	7,0 5,4 d,0 7,7 17,0 22,8	3,50 2,55 4,60 6.15 13,20 21,00	1 0 3,38	4,29, 7,07 11,05 14,43 17,81 21,19	6,12 6,46 8,28 4,61			2	15 60	0 0.0 57,9 0,4 0,9 7,2 0 18,6	3,2 6,5 8,3 15,0	0,55 3,45 4,60	" , 0	$2 \begin{vmatrix} 9.96 \\ 13.94 \end{vmatrix}$	7   6,42 6,51 1 9,34 3   6,83	
		0,0 1,8 6,2 8,3 12,4 ) 22,9	6,1 8,0 7,9 11,4 18,1 26,0	15,25	, 0	16,32 20,48	3,10 5,1 6,4 5,2	) 1 7 3		1 2 3 4	50 55	0 0,0 58,3 5,5 11,1 0 21,7	7,2 10,8 12,2 19,0	2,75 8,15 8,85 15,05	" , O	21,8 21,8 21,8 21,8 26,3	9   5,54 1   4.66 4   8,49 6   6,8	} }
, , , , , , , , , , , , , , , , , , ,	1 2 3 4	0,0 1,2 5,6 8,3 13,7 0 25,4	5,8 5,0 7,4 14,5 19,5 28,4	$egin{array}{c c} 3,10 \\ 4 & 6,60 \\ 2 & 11,2 \end{array}$	5 4		7 5,2 5 6,5 3 6,4 1 5,9	7 5 8		1 2 3 4 6	50 55	0 0,0 59,5 5,10,0	$egin{array}{c ccccccccccccccccccccccccccccccccccc$	4,1 8,5 9,0 4   14;4	5 5 0 0	3,9 8,3 12,7 17,1 21,4 25,8	1 4,10 0 4,1 0 8,1 9 7,0	3 5 0 9

No.	Reading at Micros. A.	Mic.	Aean. De L	e e	Diff. or err, div.	Observer.	No.	Rending nt *	Mic.	Mean	True Z	Corrected Mean	Diff, or err, div.	Observer.
1 2 3 4 5	50 0 0,0 58,5 3,8 4,2 9,0 55 0 18,5	8.0   3 10,0   0 10,6   3 10,4   13	3,15 3,25 6,90 7,40 2,70 2,35	3,56 7,53 11,49 15,46 19,42 23,39	"	т, & В	1 2 3 4 5	60 0 0,0 59,2 3,2 4,9 9,9 65 19,2	3,8 4,4 9,4 10,7 16.0 26,4	1,90 1,80 0,30 7,80 12,95 22,80	1 0 4,20	3,36 7,56 11.76 15,95 20,15 24,35	7,45 5,75 5,45 8,15 7,20 1,55	T, & V.
1 2 3 4	50 0 0,0 57,1 4,9 4,9 9,0 55 18,6	6,3 10,7 12,0 17,9, 1	2,90 1,70 7,80 8,46 3,45 2,45	3,31 7,35 11,38 15,42 19,45 23,49	0,41 5,65 3,58 6,97 6,00 1,04		1 2 3 4 5	60 0 0,0 50,2 3,9 6,0 11,3 65 22,0	4,6 4,9 9,3 11,6 18,0 28,3	2,25 2,05 6,60 8,80 14,65 25,15	ا ،	3,70 8,30 12,90 17,50 22,10 26,70	1,45 6,26 6,30 8,70 7,45 1,66	
1 2 3 4 5	50 0 0,0 59,3 4,2 6,3 11,0 55 22,3	7,7 10,9 12,9 19,4	3,45 3,50 7,55 9,60 6,20 6,90	3,86 8,48 13,09 17,71 22,32 26,94	-0,41 4,98 5,64 8,11 7,12 1,04		1 2 3 4 5	60 0 0,0 0,5 : 4,8 6,1 12,0 65 0 22,0	4,0 6,1 0,9 12,4 18,1 27,9	2,00 3,30 7,35 9,25 15,05 24,95	أجا	3,45 8,00 12,67 17,28 21,89 26,50	-1,45 4,70 5,32 8,03 6,84 1,55	
1 2 3 4 6	55 0 0,0 1,8 6,3 7,4 13,9 00 0 24,3	8,4 13,0 13,2 20,3	3,65 5,10 9,65 0,30 7,10 6,75	4,69 9,39 14,09 18,79 23,50 28,20	1,04 4,29 4,44 8,49 0,40 1,45	V. & S.	1 2 3 4 5	60 0 0,0 59,7 3,8 7,3 11,3 05 21,8	4,6 5,4 8,5 12,1 17.7 27,7	2,30 2,55 6,15 9,70 14,50 24,75	إيرا	3,75 8,26 12,77 17,28 21,79 26,30	-1,45 5,71 6,62 7,58 7,20 1,55	
1 2 3 4 5	55. 0 0,0 59,0 3,9 4,0 7,9 60 18,5	7,2 10,0 9,2 14,2	3,90 3,40 6,95 0,60 1,05 1,05	4,94 8,45 11,96 15,47 18,99 22,50	-1,04 5,05 5,01 8,87 7,94 1,45		1 2 3 4 5	05 0 0,0 53,9 3,9 5,9 11,1 70 0 24,2	6,7 10,7 12,4 14,4 19,2 29,4	3,35 4,80 8,15 10,15 15,15 26,80	) I	4,90 9,06 14,42 19,17 23,93 28,69	-1.55 4,86 6,27 9,02 8,78 1,89	
1 2 3 4 5	55 0 0,0 1.6 7,2 7,9 12,0 60 0 22,7	8,3 12,1 13,8 17,3	3,70 4,95 9,65 0,85 4,66 6,00	4.74 9,08 13,42 17.76 22,11 26,45	1,04 4,13 3,77 6,91 7,46 1,45		1 2 3 4 5	65 0 0,0 57,5 3,9 0,7 14,8 70 0 27,2	7,4 9,5 14,0 15,8 21,7 31,0	3,70 3,50 8,95 11,25 18,25 29,10	, 0	5,25 10,40 15,55 20,69 25,84 30,99	1,55 6,90 6,00 9,44 7,59 1,89	
1 2 3 4 5	55 0 0,0 59,7 4,0 4,7 12,3 60 22,7	6,6 10,2 10,5 18,8	3,45 3,15 7,10 7,60 5,50 24,85	4,49 8,85 13,21 17,57 21,94 26,30	-1,04 5,70 6,11 9,97 6,44 1,45		1 2 3 4 5	65 0 0.0 57,8 4,4 6,8 15,7 70 0 28,8	.7,3 9,1 12,0 15,7 23,4 32,1	3,65 3,45 8,50 11,25 19,55 30,45	1 0	5 20 10,63 16,06 21,48 26,91 32,34	-1,65 7,18 7,60 10,23 7,36 1,89	
1 2 3 4 5	55 0 0,0 0,5 3,7 4,2 9,6 60 0 10,4	0,5 9,8 9,0 14,8 1	3,60 3,50 6,75 0,60 12,20 21,55	4,64 8,31 11,98 15,65 19,33 23,00	-1,04 4,81 5,23 9,05 7,13 1,45		1 2 3 4 5	65 0 0,0 57,8 4,0 6,0 14,4 70 0 27,3	7,5 9,8 12,1 15,1 21,4 31,8	3,7 <i>5</i> 3,80 8,0 <i>5</i> 10, <i>55</i> 17,90 29, <i>55</i>	1 0 5,23	5,30 10,53 15,76 20,98 26,21 31,44	1,66 0,73 7,71 10,43 8,31 1,89	
1 2 3 4 5	60 0 0,0 0,1 3,9 7,3 13,1 65 23,8	4,0 8,9 12,3 19,0 1	2.16 2.06 6,40 9.80 0,06 26,66	3,00 8,52 13,44 18,36 23,28 28,20	-1,45 6,47 7,04 8,68 7,23 1,65	T. & V.	12545	05 0 0,0 59,7 6,2 9,0 17,2 70 0 30,0	7,9 9,9 14,9 17,8 24,1 33,7	3,95 4,80 10,55 13,40 20,65 32,15		5,50 11,21 16,92 22,62 28,83 34,04	-1,55 6,41 6,37 5,22 7,68 1,89	

No.	Reading at Micros. A.	Mic.	Mean.	True Z	Corrected Mean.	Diff. or	Obser-	No.		eading at licros.	Mic.	Mean.	True Z	Corrected Mean.	Diff or	Obser-
1 2 3 4	70 0 0,0 1,1 7,8 8,6 14,7 7,5 0 27,9	4,6 6.9 11,4 14,7 20.0 31,7	2,30 4,00 9,60 11,65 17,35 29,80	0 5.33	4,19 9,52 4.85 0,18 5,51 0,84	r t	T. & S.	1 2 3 3 5	8	0 0.0 59,1 5,2 8,3 16,8 0 27,9	4,3 6,3 12,1 15,2 22,1 34,6	2,15 2,70 8,65 11,75 18,95 31,25	o ' " T	3,19 8,88 14,57 20,27 26,96 31,65	7,01 0,40	V.&S.
1 2 3 4 5	70 0 0,0 0,8 7,2 8,2 15,2 75 0 28,2	5,9 7,3 11,7 14.4 20,7 33,2	2,95 4,05 9,45 11,30 17,95 30,70	1 0 2	4,84   0,22   5,60   20,98   26,36   31,74	1,89 6,17 6,15 9,68 8,41 1,04		1 2 3 4 5	80 85	0 0,0 58,7 6,9 7,9 14,7	7,8 7,1 12,4 15,7 21,0 32,5	3,90 2,90 9,65 11,80 17,85 30,30	1 0 5,26	4,30 9,56 14,82 20,08 25,35 30,61	-0.40 6,66 5,17 8,28 7.50 0,31	Т.&В.
1 4 3 4 5	70 0 0,0 1.9 6,8 8,8 14,5 75 0 26,8	6,9 8,7 11,3 14,8 19,3 31,2	3,45 5,30 9,05 11,80 16,90 29,00	1, 0	5,34 10,28 16,22 20,16 25,10 30,04	- 1,89 4,98 6,17 8,36 8,20	;	1 2 3 4 5	80 85	0 0,0 2,5 8,8 10,1 18,3 0 31,4	8.5 9,5 14,2 17,4 25,1 36,0	4,25 6,00 11,50 13,75 21,70 33,70	1 0 5,87	4.65 10,52 16,39 22,27 28,14 34,01	-0,40 4,52 4,89 8,52 6,44 0,31	
1 2 3 4 5	70 0 0,0 1,7 7,3 8,2 16,1 75 0 28,2	7,1 8,2 11,7 14,1 21,9 33,9	3,55 4,95 9,50 11,15 19,00 31,05	10	5,44 10,77 16,10 21,43 26,76 32,09	7,70 1,04	2	1 2 3 4 5		2,7 8,2 9,8 16,0	8,0 9,3 13,8 17,3 23,2 34,3	4.00 6,00 11,00 13,55 19,60 31,80	1 0 5.54	15,48	-0,40 3.94 4,48 7,48 6,97 0,31	
1 2 3 4 5	70 0 0,0 1,9 7,8 9,2 15,0 75 0 28,1	5,0. 8,0 12,0 14,5 20,7 33,1	2,50 4,95 9,90 11,85 17,85 30,60	1	4,39 9,84 15,29 20,74 26,19 31,64	- 1,89 4,89 5,39 8,89 8,3 1,0	9	1 2 3 4 5	ŀ	1,2 6,4 7,7 13,9	8,4 7,6 12,7 15,3 21,0 32,8	4,20 4,40 9.55 11,50 17,45 29,55	0.7	14,70 19,76	-0,40 5,25 5,15 8,26 7,36 0,31	
1 2 3 4 8	5,2 8,2 14,6	6,1 8,0 12,4 14,2 22,3 33,6	3.05 4,00 8,80 11,20 18,45 30,25		4,09 9,40 14,71 20,03 25,34 30,65	- 1,0 5,4 5,9 8,8 6,8 0,4	0 1 3 9	1 2 3 4 5		0,9 6,8 7,7 14,1	8,2 9,0 13,1 15,0 21,3 32,4	4,10 4,95 9,95 11,35 17,70 29,60	, , ,	14,66	-0,40 4,63 4,71 8,39 7,13 0,31	•
4	75 0 0.0 0,8 5,0 8,2 15,2 80 0 27,7	11,9 13,5	4,60 8,45 10,85 18,30		4,24 9,69 15,14 20,60 26,05 31,60	5,0 6,6 9,7 7,7	9 9 5 6	1 2 3 4 5		0,8 5,7 7,0 14,2	6,5 7,4 11,0 15,1 20,4 30,0	3,25 4,10 8,35 11,05 17,30 27,60	0 1	13,43 18,36	-0,31 4,39 5,08 .7,31 6,00 0,63	
Carl Suppose	75 0 0,0 1 24,1 2 6,1 3 10,3 4 18,1 5 80 0 28,5	17,0 24,4	10,05 13,66 21,25		3,89 9,68 15,47 21,27 27,06 32,86	4.0 5,4 7,6 5,8	3 2 2 1	1 2 3 4		5 0 0,0 1,8 6,2 8,2 13,2 0 0 25,2	5,4 0,2 11,1 14,9 20,0 30,7	5,00 8,65 11,55 16,60	, , ,	13,24	-0,31 3,12 4,59 6,80 6,87 0,63	
	75 0 0, 1 0, 2 5, 3 8, 4 15, 5 80 0 26,	7,7 12,2 15,3 2 21,8	4 00 8 60 12,00	0 / 1	3,74 9,19 14,64 20,10 26,56 31,00	5,1 6,0 8,1 7,0	9 4 0 5	1 2 3 4		1,0 5,2 6,2 11,2	5.7 7.0 11.1 13.4 17.8 29.0	8,1 <i>5</i> 9,80 14,50	0 1 0	7.94 12,73 17,51	-0,31 3,94 4,58 7,71 7,80 0,63	7

No	Reading at Micros. A.	Mlc.	Ican. Janu	Corrected Mean.	Diff. or err. div	Observer,	No.	Reading at Micros.	В.	Meun.	True Z	Corrected Mean.	Diff or err. div.	Obset- ver
1 2 3 4 5	6,2	8,3   4 12,0   1 14,0   1 10,5   1	3,16 4,95 0,30 0,10 5,65 7,86	13,47	-0,81 3,51 4,17 8,37 7,83 0,63	T, & B.	1 2 3 4 5	95 0 0 0 4	7   6,3 ,1   11,4 ,2   11,4 ,8   17,5	1,90 3,50 7,75 8,80 16,16 26,70	1 0 5,04	2,35 7,39 12,43 17,47 22,61 27,65	-0,45 3,89 4,58 8,67 7,36 0,85	
	5,4 6,9 13,2	6,4 11,2 12,9 119,3 1	3,05 3,20 8,30 9,90 6,25 27,60	13,31	0,31 5,13 5,01 8,38 7,01 0,63		1 2 3 4 5	. 58 6	5 10,4 8 15,7 8 23,5	1,40 1,95 8,45 12,75 20,85 20,35	1.0 5.67	1,85 7,52 13,19 18,88 24,63 30,20	-0,45 5,57 4,74 6,11 3,88 ,0,85	T&B.
	g S	8,4 12,9 16,6	3,45 5,20 0,90 12,10 18,25 30,00	05.10	0,63 4,15 4,72 7,80 8,93 0,45		1 2 3 4 6	2	3 22.0	1,90 4,95 11,20 13,30 19,65 30,60	.1 0 5,82	8,17 13.99 19,81	0,45 3,42 2,79 6,61 6,98 0,85	
	00 0 0, 1, 2, 3, 4, 95 0 29,	7,5 11,6 14,0 6 20,7	4,70 8,80 10,85	100,00	-0,63 4,65 6,02 9,45 8,13 0,45		1 2 3 4 5	1 6 8	8,6 8,0 8,3 13,5 8,4 16,5 4,9 26,0 37,2	3.30 4.95 9,90 12,45 20,45 32,60	1 -0 - 5.83	4,15 9.98 15,81 21,65 27,48 33,31	-0,85 5,03 5,01 9,20 7,03 0,71	
	00 0 0, 1 0, 2 8, 3 7, 4 13, 5 90, 0 27	8   7,8   2   12,8   1   14,3   7   20,6	4,30   1 9,50   10,70	1.5	8,03		1 2 3 4 5	57	0,0 5,4 7,5 8,0 0,8 8,0 5,5 11,3 20,4	2,70 1,75 3,85 2,75 8,85 16,10	1 0 2,65	3,55 6,20 8,85 11,51 14,16 16,81	-0,85 4,45 5,00 8,76 7,51 0,71	in the state of th
	90 0 0 1 2 1 4		3,75 4,15 8,00 10,16 16,90 30,00	4,38 9,59 14,81 20,09 25,24 30,46	5,44 6,81 9,87 8,34		1 2 3 4 5	5	0,0 4,0 8,2 3,0 0,8 6,1 0,0 4,5 2,4 9,0 3,0 18,0	2,00 0,60 2,95 3,25 5,70 15,60	1 0 2.67	8,19 10,86	0,85 4,92 5,24 8,61 7,84 0,71	
	1 4 4 3	0 6,7 9 8,6 9 12,1 13,8 12,7 7,7 3),0	3,35 6,20 8,50 10,36 17,95 29,35	91.3,98 9,14 0 14,3 19,42 24,64 20,86	3,94 5,83 7 9,19 1 6,69	4 1 2 9	1 2 3 4 5	δ	0,0 8,3 0,8 9,5 6,0 6,8 4,2 10,1 6,3		018	7,09 10,28 13,48	0,88 10,33 9,52	
	1 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	0,0 4,5 1,2 6,4 5,7 11,4 8,2 14,9 3,2 22,3 8,7, 31,4	2,25 3,80 8,56 11,56 10,26 29,06	77 2,70 8,14 13,5 19,0 24,4 29,9	$ \begin{array}{c cccc} 4,3 \\ 5,0 \\ 2 & 7,4 \\ 6 & 5,2 \end{array} $	4 3 7 1	1 2 3 4	5 5 6 5	0,0 8,4 (8,0 6,4 (9,2 5,6 (5,6,0 1,7 (56,7 5,0 (6,7 5,0 (7,0) 1,0 (7,0) 1,0	2,65 2,35 58,35 0,85	1 0 0 72	$\begin{array}{c c} 6,49 \\ 7,22 \end{array}$	8,87	T,&S
	1 2 3 4	0,0 4,4 1,3 6,8 6,7 11;3 8,1 13;9 4,8 20,0 6,2 31;2	4,05 0,00 - 11,00	8 2,8 8,0 13,4 18,7 24,1 29,6	3 3,9 1 4,4 9 7,7 7 6,7	8   19   19   19   19   19   19   19   1		1 2 3 4	0,0 5,6 55,3 25 55,2 4,6 52,2 1,5 53,2 2,1,7 9,	58,7 <i>6</i> 59,60 56,70 57,60			nat natu	i de la companya de l

I diminished the angle.

No.	Reading at Micros. A.	Mic.	Mean.	True Z	Corrected Mean.	Diff. or	Observer,	No.	Reading at Micros. A.	Mic.	Mean.	True Z	Corrected Mean.	Diff. or err. div.	Observer.
1 2 3 4 5	105 0 0,0 55,3 55,8 53,2 56,7 110 0 2,9	2,0	2,60 58,65 58,60 57,60 59,95 6,95	1 0 0,91	3,31 4,22 5,13 6,03 6,94 7,85	-0,71 5,67 6,53 8,43 6,99 0,90	т. & В,	1 2 3 4 5	0 / / 115 0 0,0 1,7 2,0 57,9 59,8 120 0 9,9	5,4 4,7 4,7 2,6 6,8 14,0	2,70 3,20 3,35 0,25 3,30 11,95	1 0 1.81	4,39 6,20 8,01 9,82 11,64 13,45	-1,69 3,00 4,66 9,57 8,34 1,50	1', & S.
1 2 3 4 5	105 0 0,0 54,2 55,0 54,3 56,8 110 0 4,7	3,2	2,75 58,90 59,10 58,15 0,65 8,10	1.0 -1:11	3,46 4,57 5,68 6,78 7,89 0,00	-0,71 5,67 6,58 8,63 7,24 0,90		1 2 3 4 5	115 0 0,0 59,1 1,7 56,9 1,7 120 0 11,7	6,2 3,0 4,2 3,5 7,0 14,0	3,10 1,05 2,95 0,20 4,35 12,85	1 0 1.91	4,79 6,70 8,61 10,52 12,44 14,35	-1,69 5,65 5,66 10,32 8,09 1,50	
1 2 3 4 5	105 0 0,0 84,2 55,6 52,9 54,7 110 0 2,2	5.0 2.0 3,2 0,3 2.6 10,0	2,50 58,10 59,40 56,60 58,65 6,10	1 0 0.76	3,21 3,97 4,73 5,48 6,24 7,00	5,87 5,33 5,33 8,88 7,59	manufacture of the state of the	1 2 3 4 5	115 0 0;0 59,3 1,0 56,7 2,8 120 0 10,5		2,55 1,20 2,35 0,35 5,20 12,70	0.1.99	4,24 6,23 8,22 10,22 12,21 14,20	-1,69 5,03 5,87 9,87 7,01 1,50	
1 2 3 4 5	106 0 00 547 567 542 560 110 0 40	3,8 59,4 0,9 0,9 2,2 10,2	1,90 57,05 58,80 57,55 59,55 7,55	1:0 1:17	2,61 3,78 4,95 6,11 7,28 8,45	30,71 6,73 6,15 8,56 7,73 0,90		1 2 3 4 5	115 0 0,0 0,2 1,1 57,5 1,2 120 0 10,0	4,4 5,3 3,7 1 8,3	3,45 2,30 3,20 0,80 4,75 13,35	o. /	14,85	4,78 5,82 10,17 8,16 1,50	
1 2 3 4 5	1 0 0 0,0 55,4 66,7 54,7 1 0 5,8	8.2 3.0 2.6 2.0 2.4 10.4	4,10 59,20 59,65 58,35 0,55 8,10	0 ( ".	5,00 5,96 6,92 7,87 8,83 9,79	-0,90 6,76 7,27 0,52 8,28 1,69	A STATE OF THE STA	1 2 3 4 5	0,	3,7 4,8 5,2 7 8,4	3,00 1,85 3,00 2,20 4,55 14,45	0 . 9.95	6,94 9,19 11,44 13,70 15,95	5,00 6,19 9,24 9,15 1,50	
1 2 3 4 6	680	6,5 3,1 3,0 1,2 3,5 13,0	3,25 0,05 0,40 58,10 0,20 9,85	1 0 1,48	8,58	-0,90 5,58 6,71 10,48 9,86 1,69		1 2 3 4 5	0,4 59,5 3,0	3,8 5,7 7 4,1 9 8.0	1,80 3,25 1,90 5,50 14,85	0 / 4	10,86 13,23	4,32 5,24 8,06 7,73	
	58,8 65,7 68,8	3 1 4 8 2,4	3.50 0,20 1,80 59,05 1,90 10,36	70	4,40 5,93 7,46 8,98 10,61 12,04	-0,90 5,73 5,66 9,93 8,61 1,69		3 4	2,	7 4,4 7 7,0 2 6,4	7,40 17,80	0.1.0 3.09	6,47 9,49 12,52 15,54 18,86	5,14 8,22 8,14 0,76	
	110 0 0 0 0 1 57,2 2 59,0 3 65,5 4 0,0 5 115 0 9,6	4,2	3,55 0,70 1,70 58,75 2,70 11,75	8 1 0	8,05 9,84 11,64	6,35 11,09 8,94				3 4.8 7 5,8 4 4,7 7 8.8	2,55 3,75 2,30 3 6,75 3 16,55	b	11,9 14,6 17,3	4,03 5,51 9,66 7,88 1 0,76	3 de 1
	1 566 2 599 3 65, 4 58, 5 115 0 8	7   4,0 7   4,0 6   2,9 2   4,4	0,86 1,85 58,98	) 		5,20 5,32 9,77 8,9	8		2 2 3 2 6	2 5. 4 7.	3   2,75 1   4,75 0   4,10 4   8,30		3,7 6,6 9,6 12,6 15,4 18,4	8 3,9 4,8 5 8,4 7,1	3 6 5 8

															<del></del>
No.	Reading st Micros. A.	Mic. B.	Mean.	True Z	Corrected Mean.	Diff, or	Obser- ver.	No.	Reading at Micros A	Mic.	Mean.	True 4	Corrected Mean	Diff, or err. diy,	Obser- ver.
1 2 3 4 5	0 / " 120 0 0.0" 2,8 1,9 8,4 125 0 18,6	3,9 4,2 6,3 7,9 12,2 22,0	1,95 2,25 4,55 4,90 10,30	0 , , , ] ] 0 3,52	3,45 -6,97 10,49 14,02 17,54 21,05	-1,50 4,72 5,94 9,12 7,24 0,76	B & S	1 2 3 4 5	130 0 0,0; 3,2; 2,7 6,1 11,7 135 0 20,7	5,4 4,0 6,1 8,1 14,8 24,6	2,70 3,60 4,40 6,60 13,25 22,65	1 0 4.14	3,58 7,67 11,80 15,94 20,07 24,21	7,40 9,34 6,82	T & B.
1 2 3 4 5	125 0 0,0 58,7 2,7 2,2 60 130 0 163	4.7 3.6 7.3 7.9 11.8	2,35 1.15 5,00 5,05 8,90 18,00	L 0 3,14	3,11 6,26 9,40 12,64 15,68	-0,76 6,10 4,40 7,49 6.78 0,83		1 2 3 4 6	130 0 0,0 0,7 2,2 2,8 8,2 135 0 18,3	4,0 2,0 5,3 7,0 11,7 22,4	2,00 1,35 3,74 4,90 9,95 20,35	1 0 3,82	2.82 6.65 10.46 14,28 18,09 21,91	-0.83 5.30 6,71 9,38 8,14 (1,56)	
1 2 3 4 5	126' 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 16'7	3,8 6,4 8,0 11,4 19,2	2,10 1,00 4,25 5,10 8,35 17,45	1 0 3,08	2,86 5,94 9,03 12,11 15,20 18,28	-0,76 4,94 4,78 7,01 6,85 0,83		1 2 3 4 6	135 0 0,0 0,9 4,6 6,3 11,3 140 0 22,8	4,2 2,0 6,7 8,8 13.0 25,0	2,10 1,46 5,60 7,66 12,15 23,90	1-0-4:39	3,60* 8,05 12,458 16,84* 21,24 25,63	-1,56 6,60 6,85 9,29 9,09 1,73	
1 2 3 4 5	126 0 0,0, 59,2 2,8 3,7 8,3 130 0 17,7	5.1 4,2 8,2 9,1 13,8 21,2	2,68 1,70 6,60 6,40 11,05 19,45	7 1 0 3,39	3,31 6,70 10,10 13,49 16,89 20,28	7,09 5,84 0,83	T. & B	1 2 3 4 5	135 0 0.0 1.0 5,1 5,8 12,1 140 0 21,7	5468448 	2,50 2,75 5,70 7,35 13,10 29,25	17.0 4,18	4,06 8,24 12,43 16,61 20,80 24,98	1,56 5,49 6,73 9,26 7,70	A Company of the Comp
1 2 3 4 5	125 0 0,0 59,0 2,2 3,1 8,9 180 0 19,0	,	1,90 0,85 4,95 6,05 11,40 20,55	1 0 3,74	2,66 6,40 10,15 13,89 17,64 21,38	-0,76 5,55 5,20 7,84 6,24 0,83	1 200	1 2 3 4 5	135 0 0,0 3,3 5,1 7,2 13,8 140 0 24,0	6,0 4,1 8,4 8,9 16,0 27,9	3,00 d 3,70 d 6,75 d 8,05 d 14,90 d 26,95	1 0 4.62	4,56 9,18 13.81 18,43 23.06 27,68	7,06 7,06 10,38 8,16	
1 2 3 4 5	125 0 0/0 59,7 3,7 4,0 9,2 130 0 18,2	3.9 8,9 10,1 14.4	2,001 1,800 6,301 7,05 11,80 20,60	1.0.3,73		-0,76 4,69 3,93 6,91 5,90 0,83	The state of the s	1 2 3 4 5	135 0 0.0 1.2 3.0 5.8 12.2 140 0 21.0	5,0 4,3 6,4 8,2 14,8 25,4	2,50 2,754 5,15 7,00 13,50 23,20	1 0 417	4,06 8,23 12,41 16,58 20,76 24,93	7,26 9,58 7,26	
1 2 3 4 5	3,8	2,1 7,0 5,9 12,0	2,30 1,10 5,45 4,85 10,60 20,20	1 0 3,73	10.68	-0.83 6,76 6,13 9.46 7,43 1,66		1 2 3 . 4	135 0 0,0 1,0 4,2 4,3 10,1. 140 0 20,5	4.8 3,3 60 7.5 13.3 24,0	2,40 2,18 5,10 6,90 11,70 22,25	1.0.4.00		7-1,56 6,81 6,87 10,07 8,28 1,73	The state of the s
1 2 3 4 5	419 1032	1,1 7,9 8,1 8,1	6,50%		10,61 14,43 18,24	0,831 5,70 4,56 7,93 6,39		1 2 3 4 5	140 0 0,0 58,7; 3.0 1,3 2,1 3,7 (6,3 145 0 16,0	9.1 7.9 8.0 13,7	4,60 5,04 19,00	1. 6.3.03	118,10 $16.13$	5,15 54,8 8.05	
1 2 3 4 5	1 6 8		4,25 3,95 8,90	0.1	10;11 2 13;63 17;14	9,68 8,24		1 2 3 4 5	1.3 (3.9 6.3	7,6 7,4 12,5	9.40	40.004	190010	4,82 4,82 5,92 8,76 6,66	1

,	i			177			· · · · · ·				<del></del>	<del></del>			
Ņo.	Reading at Micros A	В. [	Iean.	True Z Corrected	Diff, or err. div.	Observer.	No.	Read at Micros	s. <b>A</b> ,	Mic. B.	Mean.	True Z	Corrected Mean.	Diff. or err. div.	Obser- ver-
1 2 3 4 5	140 0 0,0 58,3 0,7 1,1 5,2 145 0 14,8	3,1 6,9 8,0 13,3	3,80 4,55 9.25	88 6.86 9,75 12,63 15,52 18,40	-1.73 6,16 5,95 8,08 6,27 1,15	B. & S.	1 2 3 4 5	150 0	1,7 3,8 7,3 7,6	3,4 5,5 8,0 4,0 11,0 21,3	1,70 3,60 5,90 5,65 9,30 19,30	1 0 3,31	3,77 7,08 10,40 13,71 17,02 20,33	7,72 1,03	T. & S.
1 2 3 4 5	140 0 0,0 59,7 0,0 1,5 8,8 145 0 17,9	5,8 8,4 8,5 15,1	4,20 5,00	3,98 7,43 10,89 14,34 17,80 21,25	1,73 4,68 6,69 9,34 5,85 1,15	T. & S.	1 2 3 4 5	150 0	0,0 59,7 1,2 4,0 8,2 19,2	3,6 4,7 6,4 6,8 11,4 23,1	1,80 2,20 3,80 5,40 9,80 21,15	0 ' " 1 0 3,66	3,87 7,53 11,19 14,85 18,52 22,18	-2,07 5,33 7,39 9,45 8,72 1,03	
1 2 3 4 5	140 0 0,0 0,8 3,7 6,0 11,4 145 0 22,0	18,2	7,00 9,00 14.80	4,33 8,64 12,96 17,27 21,58 25,90	-1,73 5,09 5,96 8,27 6,78 1,15		1 2 3 4 5	150 0	59,3 2,3 3,1 7,3	3,9 4,5 6,6 6,7 11,4 22,7	1,95 1,90 4,45 4,90 9,35 20,70	1 0 3,54	4,02 7,56 11,10 14,65 18,19 21,73	-2,07 5,66 6,65 9,75 8.84 1,03	
1 2 3 4 5	4,0 7,3	6,0 6,6 6.9 7,7 11,7 20,9	4.95	0 4,15 7,55 10,96 14,36 17,77 21,17	-1,15 4,85 6,01 8,51 8,27 2,07		1 2 3 4 5	150 (	59,2 1,2 3,0 7,8	3,5 4,3 7,0 5,8 11,8 22,3	1,75 1,75 4,10 4,40 9,80 20,75	1 0 3,59	3,82 7,41 11,00 14,60 18,29 21,78	-2,07 5,66 6,90 10,20 8,49 1,03	
1 2 3 4 5	4,2 3,1 7,1	5,7 4,4 8,0 7,9 12,5 20,4	2,85 2,20 6,10 5,50 9,80 19,20	4,00 7,45 10,91 14,36 17,82 21,27	5,25 4,81 8,86 8,02		1 2 3 4 5	160	58,4 59,1 59,4 4,2	3,4 3,0 4,1 5,1 7,0 18,0	1,70 0,70 1,60 2,25 5,60 15,00	1 0 2,65	10.60	-1,03 4,68 6,43 8,44 7,74 0,99	T. & V.
1 2 3	1,7 1,7 6,7	4,4 6,3 6,4 11,7	1,65 1,85 4,00 4,05 9,20 17,60	2,80 6,17 9,57 0 12,92 16,30 19,67	4,32 5,55 8,87 7,10		1 2 3 4 5		0 0,0 68,5 0,0 0,3 4,2 0 12,9	4,1 2,0 3,5 5,5 8,1 18,9	2,05 0,25 1,75 2,90 6,15 15,90	0 , 4	8,60 11,36 14,13	-1,03 5,69 6,85 8,46 7,98 0,99	
	145 0 0,0 0,7 2 3,9 6,2 4 10,7 6 150 0 17,3	4.8 7.9 9.9	2,85 2,75 5,90 8,05 12,55 18,60	7,33 10,66 0 14,00 17,3 20,67	4,58 4,76 5,95 4,78		1 2 3 4 5		0 0,0 58,7 0,0 1,0 5,4 0 13,3	4,5 3,2 5,0 6,2 9,0 20,6	2,25 0,95 2,50 3,60 7,20 16,95	1 0 2,93	9,14 12,08 15,01	-1,03 5,26 6,64 8,48 7,81 0,99	
	145 0 0,0 1 59;3 2 3,3 3 4 8 5 150 0 17,	4,3 6,7 7,3 12,6	2,75 1,80 4,85 5,25 10,40 18,85	3,90 7,30 10,7 14,1 17,50 20,99	5,50 5,86 8,86 7,12		1 2 3 4 5	160	0 0,0 58,3 59,7 0,6 4,4 0 11,9		1,90 0,05 2,25 3,50 6,30 15,15	1 0 2.64	2,93 5,57 8,21 10,85 13,50 16,14	-1,03 5,62 5,96 7,36 7,20 0,99	
Lightness Maria	160 0 0, 2 3, 3 3, 4 6, 5 155 0 18,	8 4.4 7 6.4 7 7.4 2 10.4	2,40 2,60 5,05 5,65 8,30 20,10	EE 4,47 7,80 11,14 0 14,47 17,80 21,13	5,20 6,09 8,92 9,50		1 2 3 4 5		0 0,0 58,6 59,0 59,4 4,7 0 11,1	3,2 5,3 5,5 8,5	6,60	1 0 2,51	8,81	-1,03 5,39 6,66 8,87 7,23 0,99	

	, <del></del>		J	<u> </u>	1	1.2	l num	<del></del>	ıı ——	7 =				1	70	l	
No.	ļ	ading at ros. A.	Mic.	Mean.	True Z	Corrected Mean.	Diff. or err. div.	Obser- ver.	No.	1	eading at cros. A.	Mic.	Moan.	True Z	Corrected Mean.	Diff. or err. div.	Obser- ver
1 2 3 4 5	0	0 0,0 56,7 0,0 0,2 2,7 0 12,7	5,9 4.0 6,4 6.1 10,0 18,0	2,96 0,35 3,20 3,16 6,35 15,36	0 , ° T	3,94 6,29 8,63 10,98 13,32 15,67	7,99 5,94 5,43 7,83 6,97 0,32		1 2 3 4 5	165	0 0,0 56,3 68,4 57,8 1,8 0 11,0	7,0 4,9 7,5 4,9 9,2 17,7	3,50 0,60 2,95 1,35 5,60 14,35	0 , 7 1 0 2,06	3,82 5,88 7,94	-0,32   5,28   4,99   8,66   6,57   +0,22	
1 2 3 4 5	160 165	0 0,0 58,1 69.7 58,3 1,0 0 9,6	5.7 3.9 7,7 5,2 10,3 16,0	2,85 1,00 3,70 1,75 5,65 12,80	1 0 1,86	3,84 5,70 7,57 9,43 11,28 13,12	-0,99 4,70 3,87 7,68 6,63 0,32		1 2 3 4 5	170 175	0 0,0 57,2 58,0 58,0 2,0 0 10,7	7,9 3,7 5,2 4,3 7,7 16,9	3,95 0,45 1,60 1,15 4,85 13,80	1 0 1,88	3,73 5,61 7,49 9,38 11,27 13,15	+0,22 -5,16 5,89 8,23 6,42 +0,65	
1 2 3 4 5	160	0 0,0 56,2 0,1 59,0 1,7 0 10,4	5,3 6,2 7,1 6,0 9,2 17,0	2,65 0,70 3,60 1,50 5,46 13,70	1 0 2,08	3,64 5,72 7,80 9,88 11,95 14,02	-0,99 5,02 4,20 8,38 6,50 0,32		1 2 3 4 5	170 175	0 0,0 68,3 0,3 0,4 4,2 0 12,7	7,3 5,0 6,7 5,8 11,5 18,8	3,65 1,65 3,50 3,10 7,85 15,75	1 0 2,33	3,43 5,76 8,09 10,43 12,76 15,10	+0,22 -4,11 4,59 7,33 4,91 +0,65	
1 2 3 4 5	1 <i>6</i> 0	0 0,0 57,0 59,8 59,3 2,8 0 12,2	6,4 4,0 6,2 6,4 9,8 18,7	2,70 0,50 3,00 2,85 6,30 15,45	1 0 2,42	3,69 6,11 8,52 10,94 13,35 15,77	-0,99 5,61 5.52 8,09 7,05 0,32	:	1 2 3 4 5	170 175	0 0,0 58,4 1,3 1,2 4,3 0 12,9	8.9 4.9 7,4 5,4 11,4 18,4	4,45 1,65 4,35 3,30 7,85 15,65	1 0 2,15	4,23 6,38 8,54 10,69 12,85 15,00	+0,22 -4,73 4,19 7,39 5,00 +0,66	
1 2 3 4 5	160 16 <i>6</i>	0 0,0 57,4 0,5 0,5 3,7 0 13,1	6,5 4,5 7,2 6,8 10,3 18,5	2,75 0,95 3,85 3,65 7,00 16,80	1 0 2,48	3,74 6,22 9,69 11,17 13,64 16,12	-0,99 5,27 4,84 7,52 6,64 0,32		1 2 3 4 5	170 176	0 0,0 68,8 0,0 59,8 3,1 0 11,6	8,3 6,1 7,4 6,3 0,8 18,4	4,15 2,45 3,70 3,05 6,45 15,00	1 0 2,08	3,93 6,01 8,10 10,18 12,27 14,35	+0,22 -3,56 4,40 7,13 5,82 +0,65	
1 2 3 4 6	16 <i>5</i>	0 0.0 53,7 55,7 53,7 55,2 0 3,0	4,2 0,5 1,9 59,7 1,7 10,8	2,10 57,10 58,80 56.70 58.45 6,90	28,0 0 1	2,42 3,27 4,12 4,98 5,83 6,68	-0,32 6,17 6,32 8,28 7,38 +0,22		1 2 3 4 6	170 175	0 0,0 57,7 0,2 68,7 1,0 0 9,7	7,3 4,0 7,1 6,0 8,5 17,1	3,65 0,85 3,65 2,35 4,75 13,40	98'1 0 1	3,43 6,29 7,16 9,02 10,89 12,76	+0,22 -4,44 3,51 6,67 6,14 +0,65	
1 2 3 4 5	165 170	0 0,0 56,7 57,0 55,0 56,7 0 3,9	0,9	3,00 0,35 0,10 67,95 69,85 7,60	1 0 0,81	3,32 4,13 4,94 5,76 6,57 7,38	-0,32 3,78 4,84 7,81 6,72 +0,22		1 2 3 4	17 <i>5</i>	0 0,0 57,4 59,8 59,4 2,2 0 8,0	6.2 4.5 7,9 7.5 9,3 14,9	3,10 0,95 3,86 3,45 5,75 11,45	, , " I 0 1,80	2,45 4,25 6.05 7,85 9,65	+0,65 3,30 2,20 4,40 3,90 0,00	
1 2 3 4 6	165 170	0 0,0 56,4 56,7 54,7 55,9 0 3,3	2,6 2,3 0,1 1,9	2,50 59,50 59,50 57,40 68,90 6,60	1 0 0,71	2,82 3,53 4,24 4,96 5,67 6,38	-0,32 4,03 4,74 7,56 6,77 +0,22		1 2 3 4 6	175 180	0 0,0 68,3 69,7 67,6 0.7 0 6,7	7,2 4,9 6,3 5,2 7,0 16,3	3,60 1,60 3,00 1,40 3,8 <i>5</i> 11,50	1 0 1,71	2,95 4,66 6,37 8,08 9,79 11,60	+0,65 -3,06 3,37 6,68 5,94 0,00	
l 2 3 4 5	165 170	0 0,0 58,7 0,0 57,8 59,6 0 7,0	6,9 6,5 3,2 5,7		1 0 1,20	3,87 5,07 6,27 7,48 8,68 9,88	-0,32 2,27 3,02 6,98 6,03 +0,22		1 2 3 4 6	175 180	0 0,0 68,7 0,0 57,3 1,4 0 7,8	7,4 5,6 7,1 5,3 8,4 15,2	3,70 2,16 3,55 1,30 4,90 11,60	1.0.169	3.05 4,74 6,43 8,12 9,813	+0,65 -2,591 2,881 6,82 4,911	

No.	· Reading at Micros. A.	Mic. B.	Mean.	True Z	Corrected Mean.	Diff. or	Unact-	No.		ading at ros A.	Mic.	Меап.	True Z	Corrected	Diff. or err. div.	Obser-
1 2 3 4 5	175 0 0,0 58,7 0,3 58.9 1,6 180 0 8,7	7,0 5,8 7,4 6,0 8,7 16,4	3,50 2,25 3,85 2,45 5,15 12,55	1 0 1,94	2,85 4,79 6,73 8,67 10,61 12,55	+0,65 -2,54 -2,88 6,22 5,46 -0,00		1 2 3 4 5	175 180	0 0,0 56.5 58,1 55,1 0,0	3,9 5,5 4,0 2 8,1	0,05	1 0 1.57	7,56	+0,65 -4,37 3,84 7,71 4,98	

Arranging these several values in a tabular form, we get as follows-

		Me	asuremer	ıt,		Mean	<b>D</b> :		Me	asuremen	t.		Mean
Diameter.	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	Error.	Diameter.	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	Error.
0-180 1-181 2-182 3-183 4-184	0,00 -3,06 4,56 7,21 7,01	0,00 -3,74 6,87 8,95 8,88	0,00 -3,63 4,55 7,52 6,59	0,00 -2,91 3,72 6,40 6,83	0,00 -3,99 6,02 8,35 6,28	0,00 -3,47 4,91 7,69 6,92	40—220 41—221 42—222 43—223 44—224	-0,79 5,12 6,45 8,28 4,61	-0,79 3,10 5,11 6,47 5,23	-0,79 5,27 6,55 6,48 6,96	-0,79 4,71 4,23 6,30 5,72	-0,79 5,39 5,94 8,69 6,29	-0,79 4,72 5,66 7,24 5,50
5—185 6—186 7—187 8—188 0—189	-0,81 4,76 6,31 8,40 7,00	0,81 4,02 3,98 5,49 4,09	0,81 4,86 5,20 7,80 7,14	-0,81 4,98 6,25 8,06 7,53	-0,81 3,93 4,55 7,26 6,08	0,81 4,51 5,26 7,40 6,37	45—225 46—226 47—227 48—228 49—229	-0,19 3,69 3,90 8,65 5,31	-0,19 5,21 4,99 8,41 5,54	0,19 4,57 5,21 8,09 5,63	-0,19 4,44 6,10 9,85 0,66	-0.19 5,42 6,51 9,34 6,83	-0,19 4,67 5,34 8,45 5,90
10—100 11—191 12—192 13—193 14—194	-0,89 6,48 6,23 8,07 7,27	0,89 3,12 4,80 6,73 6,60	0,89 5,73 5,07 7,51 5,89	0,89 4,24 5,80 8,60 6,06	-0,89 4,19 3,85 6,90 6,81	0,89 4.75 5,15 7,68 6,53	50—230 51—231 52—232 53—233 54—234	0,41 5,54 '4,66 8,49 6,81	-0,41 4,16 4,15 8,10 7,09	0,41 4,28 4,59 8,06 6,72	-0,41 5,65 3.58 6,97 6,00	0,41 4,98 5,54 8,11 7,12	-0,41 4,92 4,50 7,95 6,75
10—196 16—196 17—197 18—198 19—190	2,60 4,28 7,26	-0,07 3,47 5,42 7,07 5,72	-0,07 2,95 5,58 6,66 6,14	-0,07 4,33 6,74 8,80 5,46	0,07 3,41 4,70 7,44 5,08	0,07 3,35 5,34 7,45 5,54	55—235 56—236 57—237 58—238 59—239	-1,04 4,29 4,44 8,49 6,40	-1,04 5,05 5,01 8,87 7,94	6,91 7,46	5,70 6,11 9,07 6,44	-1,04 4,81 5,23 9,05 7,13	-1,04 4,80 4,51 8,66 7,07
20—200 21—201 22—202 23—203 24—204	5,12 7,52 8 37	-0,02 3,62 3,82 6,12 4,62	-0,02 3,00 3,48 6.86 4,49	0,02 2,79 3,51 8,08 5,04	-0,02 4.54 5,71 8,03 6,90	0.02 3,81 4,81 7,19 5,24	60-240 61-241 62-242 03-243 64-244	-1,45 6,47 7,04 8,56 7,23	1,45 5,75 5,45 8,15 7,20	1,45 6,25 6,30 8,70 7,45	-1,45 4,76 5,32 8,03 6,84	-1,45 5,71 6,62 7,58 7,29	-1,45 6,79 6,16 8,20 7,20
25-205 26-206 27-207 28-206 29-20	3 4,43 7 5,55 8 7,31	-4,56 .5,35 8,15	+ 0,29 -3,25 5,54 8,47 7,31	1-0,29 -3.36 5,26 9,46 7,60	4,32	-1-0,29 -3,59 -4,82 7,64 6,64	65—245 66—246 67—247 08—248 69—249	4,86 6,27 9,02	6,60 9,44	7,18 7,56 10,23	10,43	-1,55 6,41 6,37 9,22 7,68	-1,55 6,42 6,90 9,67 7,94
30-21 31-21 32-21 33-21 34-21	1 3,41 2 3,93 3 7,06	4 65 5 86 8 08 6 29	3,77 3,35 5,59 5,27	2,58 4,57 6.47 5,96	4,18 4,12 7,37	6 91	71-251 72-259 73-253	5,52 5,24 3 8,53	6,17 6,15 9,68	4,98 6,17 8,36	6,60 10,28 7,76	4,89 5,39 8,89 8,34	11
35+21 36-21 37-21 38-21 39-21	6 2.86 7 4.4' 8 8,4'	3 3,96 7 4,39 7 7,49	-0,95 4,36 6,72 8,72	0,98 3,83 5,7 2 8,2	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	3,86 5,45 8,46	76—25 77—25 78—25	5 5,4 7 5,0 8 8,8	5,09 6,69 3 9,78	4,05 5,49 7,69	5,19 6,04 8,10	6,18 5,92 8,52	5,18 6,00 8,56

		M	еввитеган	nt,		Mean			M	easureme	nt,		1
Diameter.	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	Error.	Diameter.	No. 1.	No. 2.	No. 3.	No. 4.	No. 6.	Mean Error.
80—260 81—261 82—262 83—263 84—264	-0,40 6.66 5,17 8,28 7,50	-0,40 4,52 4,89 8,52 6,44	-0,40 3,94 4,48 7,48 6,97	-0,40 5,25 5,16 8,26 7,36	-0,40 4,63 4,71 8,39 7,13	-0,40 6,00 4,88 8,19 7,08	130—310 131—314 132—312 133—313 134—314	-0,83 5,76 5,13 9,46 7,43	-0,83 5,70 4,56 7,93 6,39	-0,83 6,15 5,86 9,68 8,24	7 -0,83 4,07 7,40 9,34 6,82	-0,83 5,30 6,71 9,38 8,14	-0,83 5,40 5,93 9,16 7,40
85—265 86—266 87—267 88—268 89—269	0,31 4,39 5,08 7,31 6,00	-0,31 3,12 4,59 6,80 6,87	-0,31 3,94 4,58 7,71 7,80	-0,31 3,61 4,17 8,37 7,83	5,13 5,01 8,38 7,01	0,31 4,02 4,69 7,71 7,10	135-316 136-316 137-317 138-318 139-319	-1,56 6,60 6,85 9,29 9,09	-1,66 5,49 6,73 9,26 7,70	-1,56 5,48 7,06 10,38 8,16	1,56 5,48 7,16 9,58 7,26	-1,56 6,81 6,87 10,07 8,28	-1,56 5,77 6,95 9,72 8,10
90—270	-0 63	-0,63	0,63	-0,63	-0,63	-0.63	140320	-1,73	-1,73	-1,73	1,73	-1,73	-1,73
91—271	4,15	4,65	4,75	5,44	3,94	4,59	141321	5,15	4,83	6,16	4,68	5,09	5,18
92—272	4,72	6,02	4,92	6,81	5.81	5,66	142322	5,48	5,92	5,95	6,60	5,06	6,00
93—273	7,80	0,45	9,10	9,87	9,12	9.07	143323	8,05	8,70	8,08	9,34	8,27	8,50
94—274	6,93	8,13	8,03	8,34	6,69	7,62	144324	6,13	6,66	6,27	5,85	6,78	6,34
95—275	-0,45	0.45	-0,45	0,45	-0.45	0,45	145-325	-1,15	-1,15	-1,15	1,15	-1,15	-1,15
96—276	4,34	3.08	3,89	5,57	3.42	4,24	146-326	4,85	5,25	4,32	4,58	5,50	4,90
07—277	5,03	4,41	4,68	4,74	2.79	4,33	147-327	6,01	4,81	5,55	4,76	5,86	5,40
98—278	7,47	7,79	8,67	6,11	6,61	7,33	148-328	0,51	8,86	8,87	6,95	8,86	8,21
99—279	5,21	6,77	7,36	3,88	5,98	5,84	149-329	8,27	8,02	7,10	4,78	7,12	7,06
100—280	-0.85	-0,85	0,8 <i>5</i>	-0,85	0.85	-0,85	160—330	-2,07	-2,07	-2,07	-2,07	-2,07	-2,07
101—281	5.03	4,45	4,92	5,84	3,12	4,67	161—331	5.20	3,48	6,33	5,66	5,66	6,07
102—282	5.91	6,00	<i>5</i> ,?4	6,88	4.14	5,43	162—332	6,09	4 90	7,39	6,65	6,90	6,39
103—283	9.20	8,76	8,61	10,33	8,87	9,15	153—333	8,92	8,06	9,45	9,75	10,20	9,28
104—284	7,03	7,51	7,84	9,62	7,09	7,80	154—334	9,50	7,72	8,72	8,84	8,49	8,65
105—285	-0,71	-0,71	-0,71	0,71	0,71	-0.71	165—335	-1,03	-1,03	1,03	-1,04	-1,00	-1,03
106—286	5,10	5.67	5,67	5,87	6,73	5,79	156—336	4,88	5,59	5,26	5,52	5,39	5,29
107—287	4,89	6,53	6.58	5,33	6,15	5 90	157—337	6,43	6 85	6,64	5,96	6,66	6,51
108—288	8,42	8,43	8.63	8,88	8,66	8,58	158—338	8,44	8,46	8,48	7,35	8,87	8,32
109—289	8,16	6,99	7,24	7,59	7,73	7,54	150—330	7,74	7,98	7,81	7,20	7,23	7,59
110—290	-0.90	-0,90	-0.90	0,90	-0,90	0.90	160—340	-0,99	-0,90	-0,90	0,99	-0,99	-0,99
111—291	6,76	5,58	5;73	5,65	5,26	5,78	161—341	5,94	4,70	5,02	5,61	5,27	5,31
112—292	7,27	6,71	5,66	6,35	5,32	6,26	162—342	5,43	3,87	4,20	5,52	4,84	4,77
113—293	0,52	10,48	9,93	11,09	9,77	10,16	163—343	7,83	7,68	8,38	8.09	7,52	7,90
114—294	8,28	0,86	8,61	8,94	8,98	8,93	104—344	6,97	5,63	6,50	7,05	6,64	6,56
116—296	-1,69	-1,09	-1,60	-1.69	-1,69	-1.69	164—345	-0.32	-0,32	-0.32	-0,32	-0,32	-0,32
116—296	3,00	5,65	5.03	4,78	5,09	4,71	168—346	6,17	3,78	4,03	2,27	5,28	4,31
117—297	4,66	5,66	5.87	5,82	6,19	5,64	167—347	5,32	4,84	4,74	3,02	4,99	4,58
118—298	9,57	10.32	9,87	10,17	9,24	9,83	168—348	8,28	7,81	7.56	6,98	8,66	7,86
110—299	8,34	8,00	7,01	8,16	0,15	8,15	169—349	7,38	6,72	6,77	6,03	6,57	6,60
120-300	-1,50	-1,50	1,50	-1,50	-1,50	-1,50	170—350	+0,22	+0,22	+0,22	+0,22	+0,22	+0,22
121-301	4,32	4,17	4,03	3,03	4,72	4,23	171—351	-5,16	4,11	-4,73	-3,56	-4,44	-4,40
122-302	5,24	5,14	5,51	4,86	5,94	5,34	172—352	5.80	4,59	4,10	4,40	3.51	4,72
123-303	8,06	8,22	0,05	8,45	9,12	8,88	173—353	8,23	7,33	7,39	7,13	6,67	7,35
124-304	7,73	8,14	7,88	7,18	7,24	7,63	174—364	6,42	4,91	5,00	5,82	6,14	5,66
125—305 126—306 127—307 128—308 129—309	-0,76 5,10 4,40 7,49 6,78	7,01	-0,76 5,00 4,60 7,00 5,84	-0,76 5,55 5,20 7,84 6,24	-0,76 4,69 3,93 6,91 5,90	-0,76 6,06 4,58 7,27 6,32	175—365 176—356 177—357 178—358 179—369	+0,65 -3,30 2,20 4,40 3,90	+0,65 -3,06 3,37 6,68 5,94	+0,65 -2,59 2,88 6,82 4,91		-+ 0,85 4,37 3,84 7,71 4,98	+0,65 -3,17 3,03 6,37 5,04

A mere glance at the above table renders the conviction certain,—that in addition to the unavoidable (casual) errors to which dividing must necessarily be subject from flexure in the cutting tools and apparatus &c.—there exists in the Madras Mural Circle a regular and systematic amount of error! rors of such large amount should exist at all under any circumstances—will be looked upon with astonishment if not discredit by those Gentlemen who were as well as myself invited to inspect the divisions of this instrument in Mr. Dollond's work shop in 1826 previously to its being despatched to Madras I recollect meeting the late Captain Kater about this time in London, who asserted 'that the errors of division of the Mural Circle constructed for the Madras Observatory, in no case exceeded one second,' and from a careful examination of several promiscuous divisions.—I then had entertained the same opinion but let it be recollected, how the examination in question was conducted ! the division to be examined was brought to microscope A, and the cross wires of microscope B brought to intersect the opposite division; the circle was now turned through 180°, until the division which before was employed at microscope B was brought to intersect the cross wires of microscope A, when, half the difference between the present and first reading of microscope B, shewed the error of the division at B with respect to that Let the same mode of examination be now had recourse to, and precisely the same result will obtain! But instead of employing any given division and the one immediately opposite to it, let the division 0° for instance, be brought to microscope A, and let another microscope be placed opposite to the division 178° or 179°, and then inverting the instrument, the error of division will be sufficiently obvious. With a view of satisfying myself of the correctness of the errors above found, I brought 0° to microscope A, and placed a microscopo opposite to 181° whereby I might view a division which I knew to be erroneous with respect to that which stood at microscope A, thus

Micr	0800	ре А.		Other	croscope.	
0	,	11		o	,	II .
359	59	45,9	*	181	0	0,0

Turned the Instrument through 181°, when the readings were

... err. div. at 179° + err. div. at 181° = 12",8

I then removed the microscope to 182°, when the following was read off

Turned the Instrument through 182°, when the readings were

... orr. div. at 178° + err. div. at 182° = 16,6

agreeing in both cases as nearly with the errors set down in the table, as can be expected from a single eading, and that too encumbered with error of excentricity.

Mr. Dollond has not I believe made public the means he employed for effecting the division of this Instrument, but it appears more than probable, that this systematic error—which is as follows,

For the Diameters.	Error of Division.
0 0 0	<i>"</i>
0-180, 5-185, &c.	- 0,78
1-181, 6-186, &c.	- 4,72
2—182, 7—187, &c.	<b></b> 5,33
3-183, 8-188, &c.	- 8,25
4-184, 9-189, &c.	6,91

has arisen from the employment of a tangent screw for setting off the divisions intermediate between  $0^{\circ}-5^{\circ}$ ,  $5^{\circ}-10^{\circ}$  &c. in which—an improper allowance has been made for the difference between the length of the tangent and the arc: had such a method been employed, it is reasonable to suppose, that the centre of the screw would be set opposite to the centre of the divisions nearly, in which case the difference between the tangent of 2° 30′ and the arc. of the same (= 5",8); would enter; but as the errors arrive at a maximum at about 3° 20′, 8°, 20′, &c. in which a much larger difference is found, this single circumstance alone would not fully account for the discrepancies met with.

I now placed two pairs of cross wires in the 5 feet Achromatic, at a distance of 15 minutes apart, and employing the errors found for each degree as set down in the table, (in a manner similar to that already practised for the larger divisions) found the errors of the divisions terminating the diameters 0° 15—180° 15′; 0° 30′—180° 30′; &c. as set down in the following table (column "No. 1"); but these roadings commencing at 0° and terminating at 360° necessarily pass twice over the same divisions, hence the column "No. 2". On comparing these two columns, a tolerable degree of accuracy in most cases appeared to have been attained, but occasionally—discrepancies occurring beyond the probable limits of error of bisecting and reading, I was induced in these cases to institute a re-examination, as set down in column "No. 3,"—and hence the column "Mean" was eventually obtained.

I now placed the two horizontal wires of the circle telescope nearly 5' apart, and with reference to a pair of cross lines in the five feet collimator, repeated the measures of their distance on every division of the circle twice over, when—employing the errors at 0° 15'—180° 15'; 0° 30'—180° 30'; &c. just arrived at, the errors the intermediate diameters were at length obtained; in a few cases a re-examination has been thought necessary and occasionally a result has been rejected, but due notice of this is given in the table.

Diam.	No. 1.	No. 2.	No. 3.	Mean.	Diam.	No. 1.	No. 2.	No. 3.	Mean,	Diam.	No. 1.	No. 2.	No. 3,	Meun.
0	0,00 -0,20 -0,50 +1,27 -0,51 0,76 1,06 1,59 0,92 2,29 2,23 2,85	0,00 -0,25 -0,31 -1,07 1,07 1,38 2,19 3,29 2,67 2,45 2,68 3,45	-0,07 1,09 1,55 1,85 2,05	0,00 -0,22 -0,35 +0,04 -0,79 1,07 1,45 2,14 1,81 2,26 2,45 3,15	4	7,09 7,11 5,97 5,70 4,93 4,26 3,38 2,99 1,91 0,69 0,43	7,82 7,03 6,99 5,20 4,53 3,27 3,14 2,27 1,49 1,08 0,67	"	-6,92 7,45 7,07 6,48 5,45 4,73 3,76 3,26 2,63 1,70 0,88 0,55	8 } 0	7,08 6,46 6,83 5,42 5,39 5,81 7,67 7,77 8,34 7,33 7,17	-6,35 6,65 6,58 6,87 6,84 7,61 7,94 7,98 8,39 7,20 7,52	5,79 6,13 7,03	7,40 6,71 6,55 6,40 6,14 6,12 6,52 7,80 7,87 7,92 7,26 7,35
1 } 0 5 5 10 15 20 25 30 35 40 45 50 55	3,88 4,64 5,20 5,10 4,61 5,58 5,44 5,38 5,26 4,97	-4,08 3,94 4,00 4,77 4,20 4,55 5,09 4,83 4,67 5,08 4,76		-3,47 3,98 4,29 4,60 4,93 4,45 5,06 5,26 5,11 4,96 5,02 4,84	5	0,94 2,02 3,00 2,92 3,33 2,83 3,47 3,95 3,67 4,61 4,16	-0,97 1,79 3,12 3,08 3,86 3,14 3,18 2,83 4,15 4,20 3,83	3,33 3,61 4,08	0,81 0,95 1,90 3,15 3,00 3,59 3,19 3,32 3,39 3,97 4,40 4,00	9 189 0 5 10 15 20 25 30 35 40 45 50 55	5,90 5,39 3,60 4,38 4,15 3,74 2,88 1,12 1,03	-6,23 6,45 5,85 5,05 5,08 3,78 3,35 2,96 1,92 1,48	-5,76 3,62 4,16 4,53 2,43	6,37 6,18 5,67 5,67 4,29 4,54 4,15 3,54 2,74 2,17 1,47 1,33
2 182 \ 0 5 10 15 20 25 30 35 40 45 50	4,44 4,69 6,31 5,69 5,78 6,30 7,01	-4,11 3,87 4,04 5,42 5,71 6,29 7,02 6,50 5,74 *8,96 7,75	-7,16 6,90	-4,94 4,28 3,77 4,03 4,93 5,20 6,30 6,35 6,14 6,02 7,08 7,72	6 } 186 } 0 5 10 15 20 25 30 35 40 45 55	5,43 6,00 6,62 6,07 6,97 6,53 5,84 5,50 6,30 5,59	-6,14 6,37 4,68 6,05 6,64 5,96 6,32 6,31 5,08 5,14 5,53	5,53 6,59 5,90	-4,51 5,78 6,18 5,61 6,06 6,30 6,03 6,03 6,03 6,03 6,03 5,90 5,76 -6,36 5,35	10 } 0   10   5   10   15   20   25   30   45   50   55   55   10   10   10   10   1	1,28 1,51 1,39 1,53 2,07 3,64 3,50 3,00 2,55 3,46	-1,06 1,83 0,71 2,22 2,43 2,77 4,51 3,02 3,33 3,39 4,15		-0,89 1,17 1,67 1,05 1,87 2,25 3,20 4,01 3,01 2,94 3,42 4,11
3 183 0 5 10 15 20 24 44 44 56 56 54 184 }	6,54 6,64 6,64 5,64 5,64 7,08 7,11 7,34 8,76 0,843 5,76	5,72 5,98 7,14 6,75 7,77 7,91		7,69 7,26 6,58 6,39 6,47 5,68 6,53 7,13 7,05 8,26 8,17 7,43 6,92	7	4,91 5,46 4,62 5,10 5,74 5,48 5,86 6,05 5,19 6,86 6,48	-5,20 4,73 4,61 5,25 5,76 6,55 5,51 6,60 5,70 6,62 6,25		5,26 5,05 5,10 4,61 5,17 5,75 6,02 5,68 6,32 5,44 6,74 6,36 7,40	11   50   55   12   192	-5.04 4.88 4.86 5.03 4.70 4.77 5.78 5.89 5.95 4.84 4.77	4,33 4,62 4,66 4,89 6,22 5,27 6,91 6.89 6,19 6,63 6,34	-5,20 5,92 6,13	-4,75 4,68 4,75 4,91 4,96 4,96 5,32 5,89 5,76 5,23 5,05 5,15

<sup>\*</sup> Omitted.

Diam.	No. 1.	No. 2.	No. 3.	Mean	Diam.	No. 1.	No. 2.	No. 3.	Mean.	Diam.	No. 1.	No. 2.	No. 3.	Mean.
12 } 0	4,48 4,26 4,64 4,62 5,05 5,58 6,30 6,62 5,87 6,63 6,72	-4,41 3,83 4,34 4,57 5,25 5,58 5,57 5,86 6,72 7,68 7,37	"	- % -5,15 4,44 4,04 4,49 4,60 5,15 5,58 5,93 6,24 6,29 7,15 7,05	16 } 0   196 } 0   196 } 0   15   20   25   30   45   50   55	7,05 3,85 3,37 4,16 4,33 4,59 5,21 5,38 6,22 5,37 4,85	-4,59 3,99 3,69 3,94 4,39 5,49 6,84 5,27 6,61 6,13		-3,35 3,82 3,92 3,44 3,92 ±,13 4,49 6,35 5,61 5,74 6,49 4,99	20 } 200 } 0 5 5 10 15 20 25 30 45 50 55	+0,85 +0,44 +1,11 -0,64 1,08 1,66 2,13 2,79 1,50 2,00 2,21	+0,07 +0,26 -0,48 1,04 0,78 2,24 1,49 2,62 1,85 3,07 3,92	1,72 1,96 1,62 3,59	7 -0,02 +0,46 +0,36 +0,10 -0,84 0,93 1,87 1,81 2,65 1,80 2,20 3,24
13 } 0 103 \$ 0 15 20 25 30 35 40 45 50 55	7,63 6,91 6,35 6,67 6,79 7,19 7,10 6,73 7,79 7,00 6,69	-6,79 7,52 6,75 5,64 6,52 7,24 7,78 7,30 7,14 7,41 6,61		-7,68 7,16 7,21 6,55 6,15 6,65 7,21 7,44 7,01 7,46 7,20 6,85	17 107 50 10 15 20 25 30 35 40 45 50 55	-5,74 3,54 3,86 6,11 6,63 5,49 6,06 5,81 5,91 7,44 6,77	-5,04 4,79 5,53 5,34 6,25 7,57 8,01 7,56 7,06 6,82 6,79	6,37 5,68 5,95 6,01 6,38 6,64 6,57	-5,34 5,72 5,23 6,74 6,44 6,36 6,82 6.67 6,81 7,13 6,78	21 } 201 } 0 5 10 15 20 25 30 35 40 45 50	4,01 4,16 3,71 4,13 4,94 4,01 6,60 5,59 5,96 5,23 4,74	-4,80 4,08 4,73 4,12 4,96 5,01 5,43 5,58 6,14 5,65		-3,81 4,40 4,12 4,22 4,13 4,95 4,51 5,61 5,77 5,68 5,20
14 } 0 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	1,66 0,58 0,56 0,97	-5,92 5,41 5,82 4,36 3,33 2,85 1,73 1,61 1,34 0,12 +0,01		-6,53 6,34 5,33 5,35 4,13 3,48 2,65 1,70 1,10 0,95 0,54 0,50	18 } 0 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	6,50 6,65 6,31 5,91 6,73 6,29 7,19 6,40 6,56 6,31	-7,33 7,61 5,98 6,21 6,17 6,70 6,89 6,44 5,92 6,04 4,04		-7,45 6,91 7,13 6,14 6,06 6,45 6,49 7,04 6,46 6,24 6,17 5,06	22 } 202 } 0 5 5 5 5 5 5 5 5	-3,41 3,77 2,90† 4,46 4,46 4,60 6,87 5,86 6,94 6,84 7,04	-4,39 4,18 4,68 3,77 3,72 5,50 7,25 6,57 5,62 6,21 6,52	6,30 6,31 6,00 5,20	-4,81 3,90 3,97 4,62 4,11 4,08 5,43 6,81 6,14 5,59 6,52 6,78
15 } 195 } 0 5 100 5 100 15 200 25 30 35 40 45 50 16 } 0 196 }	-0,02 -1-0,03 -0,03 1,02 1,97 3,98 3,88 3,25 3,60 2,80 2,08	+0,69 -0,05 +1,00 +0,10+ -1,83 3,13 3,00 1,87 3,32 3,26	1,98 3,26 2,62	-1,01 1,97 3,16 3,51 3,12	19 0 50 55 100 200 35 40 45 20 200 50 50 50 50 50 50 50 50 50 50 50 50 5	-4,10 4,46 4,53 4,68 3,00 3,03 1,94 2,20 1,22 2,02 0,42	-5,48 4,92 4,09 3,08 3,11 2,14 1,56 1,39 1,53 0,08 0,55		-5,54 4,79 4,69 4,31 4,33 3,06 2,58 1,75 1,79 1,37 1,50 0,49 0,02	23 } 0 203 } 0 50 10 15 20 25 30 45 50 68 24 } 0 204 }	7,65 7,31 7,31 6,67 6,64 5,89 6,38 6,39 6,46 5,94 5,14		6,69	

<sup>\*</sup> Mean of 5 measures.

Diam.	No. 1.	No. 2.	No. 3.	Mean.	Diam.	No. 1.	No. 2.	No. 3.	Mean.	Diam,	No. 1.	No. 2.	No. 3.	Mean.
24 } 204 } 0 204 } 0 10 15 20 25 30 35 40 45 50 55	-5,18 4,07 3,84 2,82 3,14 2,60 1,29 1,03 0,85 0,02 +0,36	-4,72 4,11 2,59 3,87 2,69 0,40 1,97 0,79 0,40 0,46 0,51	-3,77 2,40 0,88	5,24 4,95 4,09 3,40 3,35 2,91 1,80 1,61 0,91 0,71 0,24 0,07	28 } 0	-7,68 7,32 6,66 7,87 8,13 8,04 8,06 7,49 7,81 8,64 7,36	7,26 6,69 7,66 6,70 7,34 7,93 8,62 8,36 7,56 7,81 7,09	"	7,54 7,47 7,01 7,16 7,28 7,74 7,98 8,34 7,92 7,68 8,22 7,22	32 } 212 } 0	-4,30 4,28 4,32 5,05 4,53 5,34 5,20 4,93 6,30 6,71 6,46	-4,32 4,01 3,70 4,58 4,39 5,08 5,89 5,82 5,42 6,13 6,04	,	-4,37 4,31 4,15 4,01 4,81 4,46 5,21 5,54 5,37 5,86 6,42 6,26
25 } 0 5 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	1,70	-0,22 -1,27 +0,22 -1,10 1,27 0,45 2,87 2,20 2,57 2,73 3,28	1,20 2,56 2,12 1,70	+0,29 +0,33 -0,60 0,43 0,40 1,09 1,34 2,32 2,01 1,98 2,49 2,67	29 } 0 5 10 15 20 25 30 35 40 45 50 55	-6,36 6,73 4,48 4,22 3,62 3,16 2,52 2,32 1,90 1,20 0,89	5,53 6,27 5,53 4,76 4,47 3,61 2,66 1,68 1,00 0,50 0,29		-6,64 5,94 6,50 5,01 4,49 4,05 3,38 2,59 2,00 1,45 0,85 0,59	33 } 0 5 10 15 20 25 30 40 45 50 55	6,33 6,04 6,01 0,90 6,74 7,19 7,66 8,00	-6,63 5,49 4,51 5,82 5,93 6,16 7,29 6,79 6,42 7,61 6,42	5,39 6,57 8,25	6,91 6,51 5,62 5,41 5,93 5,97 6,54 7,01 6,99 7,44 7,75 6,61
26 } 0 5 10 15 20 35 40 45 50 55	3,77 3,90 3,77 4,83 4,49 4,17 5,09 4,48 4,08 5,28	5,15 5,39 4,86		-3,59 4,21 4,11 4,02 4,57 4,25 4,34 5,03 4,81 4,73 5,07 4,38	30 } 0 210 } 0 5 10 15 20 25 30 35 40 45 50 55	0,40 0,45 0,78 1,09 0,81 1,64 1,58 1,46	-0,25 0,26 0,40 1,13 1,79 1,90 1,64 1,94 1,01 1,74 2,54		-0,44 0,19 0,33 0,42 0,95 1,44 1,36 1,64 1,76 1,23 1,81 2,71	34 } 0 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	-5,61 5,59 4,40 4,27 4,13 2,07 2,44 1,24 2,13 2,35	5,77 5,36 5,58 8,50 3,19 3,58 2,56 2,08 1,94 1,07 1,48	5,35 2,42 1,63	-6,03 5,09 5,47 5,11 3,88 3,66 2,69 2,50 1,66 1,90 1,71 1,26
27 } 207 } 0	5 —4,68 5 3,65 5 4,13 0 3,52 5 4,05 0 6,41 5 6,01 5 8,0 5 4,90 5 5,90 5 5,90	3,56 4,06 3,44 4,83 5,82 0,12 0,58 0,58 0,48	3,81 5,25 4,91	3,67 4,09 4,07	31 \ 211 \ 0 \ 50 \ 20 \ 30 \ 40 \ 40 \ 50 \ 212 \ \ \ 212 \ \ \ \ \ \ \ \ \ \ \ \	-4,17 3,91 2,90 3,54 3,83 0 3,24 5 3,70 0 3,58 5 3,88 5 4,76	4,76 4,44 3,39 4,40 3,82 3,42 3,58 4,21	4,29 5,01	3,99 3,61 3,98 3,76 3,50	40	51,42 2,05 0,88 2,18 2,28 1,71 5 1,92 0 3,10 5 2,93 0 3,09 4,10	1,78 2,03 1,43 2,86 3,53 2,03 3,84 2,57	3,33 3,18 3,12	-0,95 1,19 1,19 1,33 2,10 1,85 2,28 2,93 2,77 3,38 2,93 4,14 3,86

Diam	No. 1.	No. 2.	No. 3.	Mean.	Diam.	No. 1	No. 2.	No. 3.	Megn.	Dlam.	No. 1.	No. 2.	No. 3.	Mean.
36 } 0 216 } 5 10 15 20 25 30 35 40 15 50 55	-3,95 5,25 3,88 4,28 4,86 5,75 6,73 5,42 6,83 4,51 4,51	-4,14 3,97 5,22 5,08 5,96 6,23 5,96 5,68 5,79 5,71 5,25	5,83 5,26	3,80 4,04 4,61 4,55 4,08 5,41 5,90 5,84 6,55 6,31 5,35 5,01	10  -	-0,12 -0,73 -0,63 0,99 1,30 2,05 2,05 4,00 3,64 4,60 5,06	1,30 0,77 0,96 1,14 1,40 2,88 3,40 3,25 3,00 3,28 4,13	"	0,79 0,74 0,72 0,28 1,07 1,35 2,26 3,18 3,62 3,59 3,04 4,59	41 0 224 0 5 10 15 20 26 30 45 50 55	-5,70 5,55 4,60 4,36 3,52 2,25 (0,56 1,64 0,69 0,91 1,20	- 5,36 4,85 5,10 4,23 3,95 3,00 1,80 2,33 1,74 1,43	-5,59 3,38 2,65 2,33 1,36	-5,60 5,63 5,10 5,10 4,30 3,73 2,88 2,22 2,10 1,26 1,17 1,23
37 } 0 217 } 0 5 10 15 20 25 30 45 60 55	-4,54 4,97 4,68 5,49 6,27 6,96 6,30 7,26 7,48 8,41 8,51	5,41 5,23 4,42 5,38 5,91 5,64 6,55 7,68 6,67 8,14 7,50		- 6,45 4,97 5,10 4,55 5,44 6,00 6,30 6,42 7,47 7,07 8,27 8,01	41 } 0   221 } 5   10   15   20   25   30   45   50   55	-4,67, 5,41, 4,84, 6,46, 6,12, 6,21, 5,94, 6,08, 5,48, 4,99, 3,25	4,30 5,53 5,28 6,13 5,71 6,44 6,09 6,20 6,45 5,89 5,52	6,52 6,66 6,81		45 0 225 6 10 15 20 25 30 35 40 45 50	+0,34 -0,47 0,17 1,34 1,84 1,85 3,02 2,94 2,94 3,72 4,87	4,80	1,20 1,38 2,66	-0,19 +0,16 -0,49 0,73 1,53 1,92 2,94 2,95 2,86 3,47 4,09 4 58
38   0 918   5 10 15 20 25 30 36 40 42 60 51	6,91 7,31 7,41 7,81 8,49 1 7,70 6,90	7,32 7,52 *6,22 *6,63 7,38 8,22 7,80 8 20 7,37	7,52 7,58	8,46 7,50 6,88 7121 7,41 7,50 7,59 8,32 7,75 7,58 7,50 6,57	42 0 5 10 15 20 25 30 35 40 45 50 55		4,80 4,06 4,93 5,16 5,24 5,33 6 0.5	4 49 5,58 3,16 4,40 6 6 6	4,78 4,92 5,56 5,24 5,27 6,84	30 35 40 45 50	5,71 5,97 6,83 5,78	5,48 6,90 5,78 5,42 5,03 6,20 6,20 6,90 6,57	5,00 5,45 6,01 6,03	5,94 5,20 5,71 6,02 6,08
10 22 22 33 44 85	5,80 5,70 5,0 4,9 5,6 6,2,9 0,2,2	0   6,70 2   5 38 2   4,54 6   4,38 3   5,80 7   2,90 5   2,30 8   2,90 7   1,70	3 5,69 3 5,69 3 4,08 5 7   1,60 8   0,4	4,71 4,42 4,50 2,97 2,27 4 2,33 9 1,01	49 0 5 10 15 20 25 30 35 40 45 50 55 44 2 0 224	6.7 6.8	1 5,82 6 6,09 9 6,1 5 5,4 5 6,5 6,5 7,2 0 7,1 7 6,9	5   2   3   3   5   5   5   5   5   5   5   5	7,24 6.70 6,38 6,09 5,39 5,86 6,73 6,87 7,24 6,84 5,5	10 12 20 21 30 31 31 31 41 41 51 41 57 48	-4,31 4,53 4,83 5,4 5,6 6,7 7,5 7,5 6,7 7,5	2 5,34 9 5,39 6,13 6,4 6,8 6,4 7,8 6,6 7,8	5 6,9 6,9 6,8 0 6,8 0 6,8 5 6,8	5,30 5,30 6,38 8 6,36 7 7,42

<sup>\*</sup> Omitted.

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Diam.	No. 1.	No. 2	No. 3.	Moan.	Diam.	No. 1.	No. 2.	No. 3.	Mean.	Dlam.		No. 2.	No. 3.	Mean.
48 0 5 10 15 20 25 30 35 40 45 50 55	-8,32 7,45 7,65 7,45 7,24 7,25 7,27 7,60 7,60 6,90 6,64	7,35 7,21 6,96 7,18 6,61 7,52 7,43 7,38 7,88 7,19 6,94	,	-8,45 7,83 7,33 7,31 7,31 6,92 7,38 7,35 7,49 7,74 7,04 6,29	52 0 232 0 10 15 20 25 30 35 40 45 50	-3,95 3,15 4,01 4,74 4 88 6,53 6,75 6,62 5,79 7,80	-4,15 3,65 3,73 4,47 4,40 5,07 7,00 6,72 7,21 7,51 7,73	-3,80 4,49 4,93 6,05	-4,50 4,05, 3,40 3,85 4,57 4,74 6,22 6,87 6,57 6,57 6,57 7,65	56 0 0 5 5 10 15 20 25 80 45 50 55	-4,53 4,87 4,03 4,66 3,87 3,56 4,15 4,88 4,19 5,17 4,44	5,02 5,34 4,53 4,81 4,42 4,51 4,16 4,39 4,53 4,53 4,12	<b>4,</b> 8 <b>3</b> <b>4,</b> 77 <b>4,</b> 96	-4,80 4,77 5,10 4,16 4,73 4,14 4,28 4,30 4,63 4,56 4,78 4,28
49 0 229 5 5 10 15 20 25 30 40 45 50 55	1,70 1,40	1,17 0,40		5,29 6,26 5,32 4,14 3,78 3,17 2,31 1,97 1,70 1,25 0,90 0,75	53 0 233 0 5 10 15 20 25 30 45 50 55	7.69 7,51 7,00 7,15 7,48 6,35 8,33 7,20 7,63 7,20	8,44 6,83 8,45 8,13 8,27 8,16 9,11 8,91 8,91	9,15	8,38 8,72	57 237 6 5 10 15 20 25 30 35 40 45 50 55	-5,46 4,87 3,77 5,37 5,37 5,08 6,30 6,07 5,90 7,59 7,97	7,09	7,09	5,68 6,57 6,73
50 } 0 280 } 0 10 11 20 21 30 44 44 55		-0,96 1,76 1,42 7 2,38 2,38 1 1,73 9 2,73 2,10 2,77 2,10 8,63	2,46	2,47 2,50 2,56 3,29 3,24	9.5 30 35 40 45 50	5,88 5,40 6,3 4,6 3,4 2,8 2,4 1,7	6 2,93 6 2,93 7 2,93 8 3,40 9 1,88	3 6,35 1 6,35	5,97 4,71 0 3,94 2,90 2,81	15 20 25 30 35 40 45 50	7,14 7,88 7,27 7,71 7,84 8,57	7,21 8,34 7,59 7,18 7,74 8,00 8,40 7,76 8,40 8,40 7,76 8,40	7,41 7,83	7,33 7,53 7,48 7,00 8,15
1 1 2 2 3 8 4 4	$\begin{bmatrix} -3,8 \\ 0 \\ 5 \\ 6,2 \\ 0 \end{bmatrix}$	6 4,77 4,33 4,90 6 5,1 6 5,6 4 5,3 11 4,7 6 4,9	7   5,26 3   5,10 9   5,10 1   3,9	5,09 4,89 5,11 5,10 4,96	10 1.5 20 2.6 3.0 3.0 4.0 4.1 5.0	2,2 2,6 1,3 2,2 1,8 1,0 3,3 2,9 3,9 3,9 3,9 3,9 4,1	5 0.6 0.9 1,2 1,2 1,5 2,2 1,3 1,3 3,8 2,7 18 3.0 3,5 4,2	5 0,9 5 1,4 3 1,4 5 3,1 1 2,0 3 3,0 0 3,7	4   1,44   1,23   1,52   1,85   3,05   3,46   4,06   4,15   4,86	10 10 10 10 10 10 10 10 10 10 10 10 10 1	6,1 5,6 4,0 4,7 4,0 2,7 5,0 2,2 2,2 0,6 0,6 1,3 0,7	3 5,9 5,9 9 4,0 6 8,2 4 4,2 8 2,1 1,3 55 1,7	1	4,40 3,67 3,07 2,24 1,83

Digni.	No. 1.	No. 2,	No. 3.	Mean.	Diam.	No. 1.	No. 2.	No. 3.	Moan.	Diam,	No. 1.	No. 2.	No, 3,	Mean.
<u> </u>					-0 /	<u> </u>				<u>  </u> 	1	· · ·	<u> </u>	<u> </u>
60 240 5 10	-2,57 2,54	1,30 1,70		1,45 1,94 2,12	64 244 5 10	7,52 6,74 5,85	7, <b>2</b> 0 6,76	<i>→6,77</i> [	7,21 7,86 6,75	68 248 5 10	-7,70 6,98	8,58 8,60 8,86	7,62 8,67	9,67 7,97 8,08
15 20 25 30 35	2,58 4,16 8,50 4,12 4,84	1,80 2,96 2,86 4,09 4,61	-3,49 8,13	2,16 3,61 3,16 4,10 4,72	20 25 30 35	5,67 5,48 4,95 4,19	5,26 5,98 5,00 3,82 4,24	5,55	5,96 5,32 5,24 4,77 4,21	20 25 30 35	8,52 7,37 7,79 9,18 9,46	6,71 8,41 7,81 9,44	8,60 7,39 8,12 8,98	8,66 7,16 8,11 8,66 9,45
40 45 50 55	3,93 4,95 5,74 5,96	4,47 4,09 4,21 4,80	5,19 4,97	4,20 4,52 5,05 5,24	40 45 50 55	3,76 2,90 3,62 2,46	3,86 2,28 2,52 1,81	3,62	3,81 3,93 3,07 2,13	40 45 50 55	9,46 10,48 9,10 8,19	9,22 8,11 10,13 9,01	9,76	9,34 9,45 9,61 8,60
61 241 5	— <b>5,</b> 95	<b></b> 5,50		6,79 5,72	65 945} 0 5	2,11	2,20 2,20		1,5 5 2,16	$\{ \begin{array}{c} 69 \\ 249 \\ 5 \end{array} \} = 0$	7,48	<b>7</b> ,91		7,94 7,70
10 15 20 25	5,60 6,19 6,90 6,03	6,31 5,45 6,28 6,65		5,95 5,82 6,59 6,34	10 15 20 25	1,97 1,08 2,46 9,99	1,19 2,18 1,99 2,60		1,58 1,63 2,23 3,30	10 15 20 25	7,07 7,00 5,99 5,17	7,88 8,95 7,67 6,76	5,49 4,51	7,47 6,97 0,3 5 5,15
30 35 40 45	6,90 7,06 6,44 6,70	6,15 7,57 7,67 5,85		6,52 7,31 7,05 6,27	30 36 40 45	4,21 4,03 4,01 3,79	4,21 4,38 4,81 5,29		4,21 4,21 4,41 4,54	30 35 40 45	5,07 5,76 3,82 4,38	5,04 2,88 2,40 3,09	2,98 2,58	5,05 3,21 2,95 3,73
50 55	6,26 5,66	6,96 6,31		6,61 5,98	50 55	4,87 5,25	5,05 6,26		4,96 5,75	50 55	3,05 1,72	4,33 2,89		3,09 230
$     \begin{bmatrix}       62 \\       242     \end{bmatrix}     0     5     10 $	5,95 4,79	5,41 5,27		5,68 5,03	240 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-6,44 7,16	-7,54 7,51		6,42 6,99 7,33	70 250 5 10	1,06 2,04	2,08 3,27		1,89 1,67 2,66
1 5 20 25 30	5,29 5,58 5,57 5,82	5,08 6,44 6,65 7,31		5,18 6,01 6,11 6,56	1 5 20 25 30	0,81 7,84 6,30 7,56	7,40 7,94 7,20 7,56	-0,21 6,38	7,13 7,33 6,63 7,56	15 20 25 30	2,12 3,40 3,37 4,01	3,14 3,72 3,91 3,63	2,59 5,14	2,02 3,56 3,64 4,26
35 40 45 50	6,86 6,96 6,56 7,40	5,92 6,64 6.63 6,90		0,14 6,80 6,60 7,15	35 40 46 50	7,38 7,10 7,40 6,94	6,88 7,05 7,25 6,42		7,13 7,07 7,32 6,68	35 40 45 50	4,22 4,74 4,55 5,51	4,16 4,81 5,13 5,89	4,80	4,19 4,78 4,86 5,70
$ \begin{bmatrix} 63 \\ 243 \end{bmatrix} $	7,30			7,13 8,20	67 247 0	7,37	7,81		7,69 -6,90	71 251 }0	5,77	6,41		6,09 5,48
10 15 20	7,99 7,98 8,25 7,21	-7,77 7,49 8,12 8,64	<u> —</u> 6,65	7,88 7,73 7,67 7,92	5 10 15 20	-4,9 t 5,62 6,3 5 6,60	-6,13 4,61 6,64 7,16	6,21 6,38 5,40	5,75 5,54 6,13 6,88	10 16 20	-7,32 7,41 0,45 6,06	-7,25 7,17 7,72 6,34	-6,48 5,68 5,90	7,02 6,75 6,69 6,20
25 30 35 40	7,40 8,15 8,42 8,20	7,37 7,18 7,98 8,38		7,38 7,59 8,20 8,29	25 30 35 40	8,32 9,51 7,49 8,15	7,35 8,99 9,43 9,37	8,80 8,84 8,21	7,84 9,13 8,59 8,68	26 30 35 40	0,78 6,07 0,31 5,83	6,69 6,92 6,29 0,73	6,07	6,73 6,55 6,30 6,28
50 55 64 0	9,10 7,98 7,09	7,49 7,66 7,08	9,00	8, 53 7,82 7,09 7,20	46 50 55 68 248	8,61 9,62 9,20	8,08 8,74 8,60	8,28	8,32 9,18 8,90 9,67	45 50 55 72 959 0	6,49 0,98 6,69	7,21 6,48 0,15	6,59	6,70 6,73 6,42 5,91
214}			<u> </u>		2485					252 }				

,	<del>,</del>		,	1	<u> </u>		<u> </u>	<del></del>	11		<u></u>			
Diam.	No. 1.	No. 2	No. 3.	Mean.	Diam.	No. 1.	No. 2.	No. 3.	Mean.	Diam.	No. 1.	No. 2.	No. 3.	Mean.
72} 0 252} 0 10 15 20 25 30 35 40 45 50 56	-5.67 4,28 5,02 5,53 6,12 7,33 7,72 7,34 7,64 8,52 7,89	6,19 4,77 4,77 5,91 6,03 6,78 7,64 7,38 6,69 8,19 7,72	5,94 5,07	5,91 5,93 4,71 4,90 5,72 6,07 7,05 7,68 7,36 7,16 8,35 7,80	78 256 0 5 10 15 20 25 30 35 40 45 50 55	-4,99 5,46 4,63 6,41 6,11 5,79 7,20 6,46 4,69 5,28 4,19	-4,72 6,01 5,07 6,40 5,83 6,06 6,36 6,06 5,36 5,52 5,43	6,47 6,79 6,47 5,87 5,69	-5,18 4,85 5,73 5,37 6,41 5,97 6,21 6,78 6,27 5,51 5,39 5,20	80	+ 0,62 -0,71 1,34 1,77 1,17 2,58 3.89 3,31 3,87 4,45 4,70	+ 0,25 - 0,09 0,73 1,79 1,75 2,37 3,64 3,61 4,69 4,35		0,40 +0,38 0,40 1,03 1,78 1,46 2,47 3,71 3,56 3,56 4,57 4,52
73 } 0 253 } 0 15 10 15 20 25 30 35 40 45 50 55	-7,84 8,35 7,65 7,12 6,76 8,71 8,14 8,60 10,36 9,17 8,94		7,29 7,58 6,98 7,04	9,15 8,29 8,34 7,63 7,39 7,35 7,94 8,73 8,76 9,50 9,53 8,47	77 0 5 10 15 20 25 30 36 40 45 50 55	-5,08 5,01 3,90 5,55 5,53 6,61 7,00 7,44 7,21 8,27 8,32	-4,03 5,36 5,14 5,14 6,90 7,43 7,55 7,89 6,97 7,91 7,64	4,53 4,36 4,57 0,69 6,90		81 } 0 261 } 5 10 15 20 25 30 35 40 45 50 55	-5,02 5,03 4,86 4,96 4,41 5,77 5,77 0,05 6,37 5,78 4,98			5,00 5,66 5,16 5,35 5,02 4,85 5,71 5,43 5,50 6,03 6,03 4,93
74 } 0 254 } 0 15 20 25 30 35 40 45 50 55	7,93 0,80 7,30 6,87 5,89 5,43 4,21 3,74 3,46 2,00 1,90		7,35 7,14 7,69 4,94 5,96 5,01 3,76 2,89 2,83	-8,17 7,72 6,58 7,02 5,71 5,76 4,98 3,58 3,02 2,96 2,27 1,46	78 0 5 10 15 20 25 30 35 40 45 50 55	7.87 7,21 6,97 6,95 6,94 7,83 9,30 8,37 8,49 9,06 7,43	-7,32 6,47 6,52 7,17 7,71 7,81 *6,80 8,38 8,53 7,47	8,21 8,55	8,56 7,60 6,84 6,87 6,73 7,05 7,77 8,44 8,46 8,44 8,79 7,45	82 0 5 5 10 15 20 25 30 35 40 45 50 5 5	-4,07 4,35 4,16 4,16,5,02 6,48 6,15 7,27 6,92	4,10 5,34 6,16 6,91 6,44 6,89	6,42	4,88 3,99 4,32 3,94 3,96 4,56 5,56 6,32 0,53 6,71 6,90 7,40
75 0 255 0 10 15 20 25 30 35 40 45 50 256 0	-0,80 1,10 1,02 2,45 2,33 2,05 3,10 3,25 3,34 4,75 4,94	-2,48 2,37 1,63; 1,22 2,39 1,93 2,08 3,19 2,88 3,56 4,47	-1,18 1,13 1,47 3,10 3,39	-1,04 1,49 1,55 1,37 1,83 2,36 2,36 2,59 3,37 3,20 4,16 4,70 5,18	79 0 5 10 15 20 25 30 35 40 45 50 55 80 0 260 }	6,86 6,07 6,07 5,37 4,28 4,10 3,39 2,88 2,22 1,28 1,29	5,98 5,86 4,27 5,61 4,60 2,59 3,79 3,73 1,92 2,28 1,60	6,84 4,73 2,66		83 0 5 10 15 20 25 30 35 40 45 50 55 84 0 264 0	-7,01 7,46 7,95 7,61 7,32 8,51 8,33 8,71 8,92 8,54 7,79	7,00 7,70 8,35 7,61 8,94 9,09 7,57 7,67	-8,90 -9,21 8,97	7,65 7,84 8,44 8,63 8,90

<sup>\*</sup> Omitted.

Diam.	No. 1.	No. 2.	No. 3.	Mean.	Diam.	No. 1.	No. 2.	No. 3.	Mean.	Diam.	No. 1,	No. 2.	No. 3.	Меап,
84 } 0 5 10 15 20 25 30 35 40 45 50 55	-7,38 6,39 5,80 5,49 5,02 4,92 2,90 2,54 1,89 2,40 1,48	-6,20 5,09 5,81 4,68 4,61 3,59 3,83 3,21 2,88 1,39 1,05		7,08 6,83 5,74 5,80 5,08 4,81 4,25 3,36 2,87 2,38 1,90 1,26	88 } 0 5 10 15 20 25 30 35 40 45 50 65	-7,17 6,29 7,09 6,23 6,50 8,28 7,25 8,26 8,06 8,27 7,11	7,50 7,05 7,49 7,49 7,04 7,18 7,71 8,59 7,21 8,33 7,34	6,83 9,09	7,71 7,33 6,07 6,90 6,86 6,77 7,43 7,48 8,42 8,42 8,30 7,22	92 } 272 } 0 5 10 15 20 25 30 35 40 45 50 55	7,49 7,46 6,68 7,73	-5,53 5,01 5,70 5,77 0,94 6,94 8,01 6,02 7,73 8,44 9,18	5,17 5,40 8,51 8,81	*5,65 5,80 5,48 5,60 5,52 5,52 7,21 7,73 6,94 7,20 8,11 8,57
85 } 0 6 10 15 20 25 30 35 40 45 50 55	-0,64 1,17 0,66 1,50 1,54 1,37 3,24 2,90 2,82 3,62 3,20	+0,49 -0,66 2,37 1,93 2,11 2,53 2,26 2,19 3,90 2,79 3,43	1,77 2,48 3,15	-0,31 0,07 0,91 1,60 1,76 1,83 2,13 2,75 2,14 3,20 3,21 3,36	80 } 0	6,56 6,13 5,34 6,22 3,99 4,69 4,08 4,05 2,68 2,10 1,29	-6,67 6,24 5,17 4,99 4,43 3,94 3,44 2,73 1,86 2,31 1,95		-7,10 6,62 6,10 5,25 5,11 4,31 3,76 3,39 2,22 2,21 1,62	93 } 0 5 5 6 10 15 20 25 30 36 40 45 50 55	-8,79 8,48 7,28 7,01 7,51 8,65 8,24 8,36 8,91 0,22 7,92	-8,35 8,23 6,58 8,05 8,79 7,20 8,13 7,83 7,06 8,30 7,94	-7,76 8,85 9,14	9,07 8,52 8,35 7,21 7,53 8,15 8,23 8,10 8,37 8,76 7,93
10 15 20 25 30 35 40 45 60 55	5,28 4,59 5,00 5,32 5,79 4,33 5,59 4,41 4,71 5,14 5,14	5,92 4,61 4,49 4,96 4,67 5,00 4,79 4,41 5,37 5,30 4,62		-4,02 5,60 4,60 4,75 5,14 5,23 4,67 5,19 4,41 5,04 5,22 4,88	90 0 5 0 5 10 15 20 25 30 35 40 45 50 55	-0,82 0,21 0,47 13,63 3,20 2,26 3,57 2,45 2,80 3,80 4,82	-0,59 0,40 0,94 1,17 1,47 2,50 1,90 2,76 3,17 4,01 4,70	1,66 0,67 2,45 2,86	-0,63 0,71 0,30 0,70 1,41 1,78 2,38 2,64 2,60 2,98 3,91 4,76	94 } 0 274 } 0 5 10 15 20 25 30 36 40 45 50 55	-7,00 6,26 6,11 6,05 4,86 4,41 4,05 3,82 2,60 1,99 1,30	-6,27 5,67 5,86 4,89 4,95 3,04 3,33 2,58 1,87 3,02 *3,11	1,84 1,24	-7,62 6,68 5,90 5,98 5,47 4,90 4,17 3,69 3,29 2,24 2,28 1,27
87 } 0 5 10 15 20 26 30 35 40 45 50 56 88 } 0	-4,38 3,48 3,62 4,10 4,53 5,90 5,25 5,60 5,73 0,54 7,94	-3,64 3,54 4,45 4,57 5,02 6,02 5,48 6,90 5,74 7,13 7,15		-4,60 4,01 3,51 4,03 4.33 5,22 5,90 5,30 5,75 6,74 6,83 7,10 7,71	91 } 0 5 10 15 20 25 30 35 40 45 50 56 92 } 0 272 }	-5,16 4,29 4,23 4,64 3,62 5,73 5,50 5,20 5,67 6,46 6,21	-4,53 4,52 4,19 4,51 5,10 5,05 5.76 5,93 6,06 5,84 5,87	5,15 4,30	-4,59 4,84 4,41 4,21 4,77 4,34 5,39 5,63 5,66 6,15 6,04 5,65	95 } 0 275 } 0 5 10 15 20 25 30 36 40 45 50 56 } 0 276 }	-1,76 0,93 1,55 2,76 2,28 3,15 3,59 3,49 3,69 3,84 3,69	0,95 1,20 0,92 1,63 2,81 1,90 2,90 2,75 2,07 3,39 4,59	2,29 2,91	-0,45 1,35 1,06 1,25 2,19 2,55 2,45 3,24 3,12 2,80 3,57 4,99 4,24

Diam.	No. 1.	No. 2.	No. 3.	Mean.	Diam.	No. 1.	No. 2.	No. 3.	Mean.	Diam.	No. 1.	No. 2.	No. 3.	Mean.
96 } 0 5 10 15 20 25 30 45 50 55	-4,71 3,68 5,05 3,83 4,77 5,41 5,00 4,49 5,07 4,03 3,53	-5,29 4,99 4,22 5,16 5,13 4,51 6,00 5,34 3,89 4,20 4,06	"	-4,24 5,00 4,34 4,64 4,50 4,95 4,96 5,50 4,91 4,43 4,12 3,80	100 } 280 } 0 5 10 15 20 25 30 35 40 45 50 55	1,89 1,98 0,43 1,10 1,64 2,26 2,72 3,24 3,39 4,14 4,86	-1,12 0,29 0,40 +0,18 +0,27† -2,21 2,20 2,56 3,46 4,65 4,74	-2,37 1,89 0,89 2,41	-0,85 1,79 1,39 0,41 0,60 2,03 2,24 2,46 2,90 3,42 4,40 4,80	104 } 284 \$ 0 5 10 15 20 25 30 35 40 45 50 55		-7,90 6,81 6,41 4,11 3,45 4,08 4,00 3,86 3,64 2,91 2,56	"	7,80 7,98 7,02 6,56 4,67 4,14 4,05 3,75 3,36 3,31 2,74 2,55
97 } 0.5 10 15 20 26 30 46 50 55	5,82	-3.47 3,82 4,67 4,60 4,83 5,96 5,34 5,32 5,40 5,47 5,87		-4,33 3,62 4,61 4,49 4,92 5,71 5,56 5,17 5,21 6,64 6,95	101 } 281 } 0 5 10 15 20 25 30 35 40 45 50 65	-5,07 5,17 4,55 4,19 4,81 5,33 5,60 5,62 6,60 5,18 5,23	-5,15 4,49 4,10 5,13 6,03 5,93 6,00 5,87 4,81 6,31 5,85	-5,46 5,65 4,74	-4,67 5,11 4,83 4,69 4,66 5,42 5,64 5,80 5,75 5,38 5,76	105 } 285 } 0: 285 } 0: 5 10 15 20 25 30 35 40 45 55	5,20 5,19	0,71 0,87 1,38 1,93 1,29 3,61 3,00 4,61 3,73 4,47 4,13	1 .	0,71 1,02 1,06 1,27 2,59 2,35 3,30 3,41 4,70 4,40 4,83 4,57
98 278 0 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	-6,17 6,02 5,88 7,73 6,78 *4,99 6,63 6,74 7,09 8,34	7,34 7,05 6,69 6,65 7,03 6,31 7,38 7,33 7,42 6,94 6,29	-7,56 7,34 8,12	7,33 6,75 6,52 6,71 7,19 6,91 6,82 7,00 7,03 7,54 7,64 6,89	25 30 35 40 45	5,18 5,11 5,34 *6,34 6,66 7,20 7,89 7,21	5,92 6,09 6,97	6,52	5,36 5,24 6,22 6,37 7,08	106 } 286 } 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	5,33 5,52 5,27 6,28 6,30 6,88 6,21 6,86 6,19 6,45	6,01 5,78	6,38 5,29	5,79 5,95 6,04 5,26 0,33 5,80 6,56 6,09 6,17 6,10 6,11 5,71
99 } 0 5 10 12 20 21 44 44 45 56 55 100 }	5,08 4,38 3,33 3,10 2,07 1,99 2,15 1,51	4,41 4,42 3,48 2,45 3,70 1,64 2,15 2,68	1,84	1,76 2,15	10 15 20 25 30 35 40 45 50	-8,85 8,05 7,84 8,10 7,62 9,63 8,41 8,50 9,31 8,63 7,87	8,65 8,36 8,16 8,10 8,86 9,00 7,70 8,52	7,68 8,19	8,23 7,89 8,47 8,63 8,75	34 44 5	4,60 4,70 4,57 4,56 4,62 6,74 6,93 7,03 7,72 5, 6,58	4,53 4,69 3,38 5,71 6,14 7,20 6,51 8,28	-5,95 5,19 7,63	-5,90 4,98 4,61 4,60 4,63 5,17 6,44 7,08 7,12 6,76 7,88 7,52 8,68

Diam.	No. 1.	No. 2.	No. 3.	Mean	Diam.	No. 1.	No. 2.	No. 3.	Mean.	Diam.	No. 1.	No. 2.	No. 3.	Mean.
108 } 0 288 } 0 5 10 15 20 25 30 35 40 45 50	7,02 7,16 7,87 7,04 8,13 9,61 9,41 9,41 9,06 8,70 9,03 8,09	-8,17 8,16 7,57 7,50 8,56 7,96 8,81 8,67 8,10 8,36 7,05	7,52 8,56 9,05	-8,58 8,05 7,66 7,65 7,27 8,34 8,71 9,11 8,80 8,62 8,70 7,57	112 } 9 5 10 15 20 25 30 35 40 45 50 55		6,44 5,87 5,47 5,69 6,65 8,09 8,44 9,03 8,40 9,02 9,42	-6.64 7,50 9,52 8,57	6,26 6,29 6,16 6,10 6,00 7,32 7,85 8,03 8,71 8,88 9,33 8,71	5 10 15 20	5,07 5,72 5,38 5,42 5,15 6,63 6,94 6,37 5,90 6,07	- 5,06 5,22 5,67 6,10 5,79 6,73 5,43 6,68 6,99 6,17 5,80	5,39 5,77 6,40	-4,71 5,96 5,47 5,48 5,79 5,47 5,88 6,03 6,81 6,69 6,03 5,93
109 } 0		-7,45 7,26 6,35 6,19 5,03 4,67 4,40 3,24 2,83 2,45 1,27		-7,54 7,17 7,10 6,41 6,98 5,94 4,77 4,21 3,28 3,07 2,27 1,60	113 } 0	-19,96 9,30 11,41 19,66 19,12 9,47 9,98 9,33 9,62 9,82 9,47	-10,41 19,16 19,29 9,76 8,56 9,97 9,15 9,02 19,60 9,81 9,49	10,67 19,80	-10,16 10,23 9,72 10,85 10,37 9,83 0,72 9,11 9,17 10,11 9,81 9,48	117 } 0 5 10 15 20 25 30 35 40 45 50 55	-5,80 5,55 5,42 7,36 7,26 7,70 9,28 9,11 •6,74 9,58 0,23	- 5,21 5,83 5,09 6,63 7,05 8,49 7,62 7,97 8,24 0,16 9,20	-7,21 8,89 9,10 9,54 8,31	-5,64 5,51 5,69 5,91 6,99 7,16 8,36 8,67 8,87 8,87 8,28 9,37 9,26
110 } 200 } 0 5 10 15 20 35 40 45 50 55	-1,30 0,90 9,93 2,77 2,90 2,97 3,76 4,06 3,85 5,97	-1,43 2,36 2,13 2,49 3,10 4,17 2,87 3,40 4,40 4,59 5,13	-1,80 3,02 3,72		114 } 0   15   10   15   20   25   30   35   40   45   50   55	- 9,93 8,03 7,58 6,09 6,27 5,74 4,62 3,21 3,64 2,78 2,36	- 8,35 8,27 7,88 6,43 6,98 5,34 5,39 4,99 3,34 3,52 2,90	-5,56 4,12	- 8,93 8,69 8,15 7,73 6,66 6,17 5,54 5,19 4,11 3,49 3,16 2,63	118 } 0	-9,02 8,95 8,19 8,31 7,69 8,71 7,93 9,09 8,93 8,98 8,21	-10,35 9,47 8,17 8,23 8,47 7,87 8,67 9,44 8,56 8,47 8,58	-8,81 8,04 8,92	9,83 9,68 9,21 8,39 8,27 8,08 8,21 8,30 9,26 8,80 8,72 8,39
111 } 0 5 10 15 20 25 30 35 40 45 50 55 L12 0 292 }	-5,78 5,98 6,19 7,16 6,39 9,00 7,06 8,04 7,18 6,51 5,88	-6,53 6,03 6,70 9,18 9,43 6,77 7,93 7,18 7,50 6,42 6,42		9,15 6,09 6,43 6,67 6,41 6,38 7,61 7,61 7,36 6,17 9,26	115 } 0 295 } 0 10 15 20 25 30 35 40 45 50 55 116 } 9 296 }	- 1,69 1,81 1,91 1,19 1,65 2,48 2,90 3,74 3,85 3,27 4,32	- 1,97 9,65 1,63 2,62 2,51 2,73 3,82 3,47 3,12 3,82 4,66		- 1,69 1,33 1,23 1,32 1,90 2,08 2,61 3,61 3,61 3,61 4,49 4,71	119 } 0 5 10 15 20 25 30 35 40 45 50 120 9 300 } 0	-8,18 7,41 6,51 5,72 5,06 4,87 2,21 2,42 2,68 1,45 1,08	9,19 7,78 6,59 6,99 4,20 4,28 8,42 4,04 2,07 1,02 1,63	3,33   1 2,15	-8,15 8,68 7,60 6,63 6,35 4,63 4,63 4,20 8,11 3,26 2,30 1,23 1,35

Diam,	No. 1,	No. 2.	No. 3.	Mean,	Diam.	No. 1.	No. 2.	No. 3.	Mean.	Diam.	No. 1.	No. 2.	No. 3,	Mean.
120 } 300 } 0 5 10 15 20 25 30 35 40 45 50 55	-1,84 2,28 1,04 2,75 2,72 2,97 3,77 3,89 3,36 3,49 4,36	-2,56 2,66 2,96 3,70 3,47 3,62 4,80 4,66 2,33 3,18 4,13	1,46 3,47 3,68	-1,50 2,20 2,47 2,02 3,22 3,09 3,35 4,28 4,27 3,12 3,33 4,24	124 } 304 } 0 5 10 15 20 25 30 35 40 45 50 55	-7,15 6,72 6,29 5,43 4,51 4,25 4,27 3,12 1,80 1,88 1,12	-8,18 6,78 6,60 6.12 4,91 4,32 3,46 3,13 2,89 1,85 1,21	"	7,63 7,66 6,75 6,44 5,77 4,71 4,29 3,86 3,12 2,34 1,86 1,16	128 } 308 } 0 5 10 15 20 25 30 35 40 45 50 55		7,43 6,54 6,04 6,53 5,56 6,62 7,93 6,47 *9,34 6,68 6,65	-6,12 5,71 5,17 6,32 6,56 7,58 6,52	-7,27 7,08 6,29 6,05 6,34 5,96 6,54 7,09 6,71 6,26 6,94 6,67
121 } 301 } 0 5 10 15 20 25 30 35 40 45 50 55		-5,58 5,28 5,02 4,82 5,33 5,66 5,93 6,86 6,85 5,45 5,67	5,09 4,76 5,26	-4,23 5,97 5,28 5,06 5,60 5,31 6,14 6,45 5,83 5,56 5,26	125 } 0 5 5 10 15 20 25 30 35 40 45 50 56	-0,46 0,21 0,05 1,38 0,74 1,89 3,18 2,55 2,33 3,21 4,59	+1,04 +0,64 +0,52 0,88 1,14 -1,51 *0,36 *0,37 2,93 3,34 4,65	+0,94 +0,28 -2,58 -2,80	-0,76 +0,51 +0,24 +0,23 -1,13 0,94 1,70 2,88 2,67 2,63 3,28 4,62	129 } 300 \$ 0 5 10 15 20 25 30 45 55 55 55	6,85 6,00 4,26 3,12 3,58 4,28 2,59 2,56 2,28	-6,38 5,54 4,92 4,37 4,18 3,78 3,05 2,77 2,63 1,65 0,66		-6,32 6,61 5,38 5,46 5,31 3,65 3,68 3,67 2,68 2,54 1,96 1,20
122 } 302 } 0 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	-4,77 5,35 4,82 5,26 5,99 7,81 6,56 7,52 6,99 7,88	-4,62 3,35 3,44 5,12 6,02 5,49 6,70 6,78 6,49 7,31 8,24	-4,15 4,51 4,69 5,50 8,04	-5,34 4,51 4,40 4,32 5,19 6,00 6,27 6,63 7,15 7,17 7,60 8,06	126 } 0 5 5 10 15 20 25 30 35 40 45 50 55	4,13 5,46 5,18 4,75 4,88 5,41 4,72	4,82 5,96 5,20 5,10	6,24 5,71	5,33 5,14	130 } 6 310 } 6 10 20 20 35 40 45 50	5 —1,99 2,60 5 2,51 3,88 5 2,94 4,39 4,94 5,07 5,42 4,56	2,39 2,16		-0,83 1,80 2,49 2,11 3,40 3,47 4,25 4,38 4,70 4,42 4,84
123 } 0 303 } 0 10 20 25 30 40 40 40 40 40 304 }	7,99 8,27 *9,07 7,54 7,36 7,83 7,09 8,26 7,66 7,77	8,51 6,87 7,17 8,09 7,24 8,36 8,26 7,95		-8,88 7,92 8,25 7,50 7,35 7,34 7,71 8,09 7,97 8,20 7,71 7,70 -7,63	127 } 307 } 0 5 5 10 16 20 35 40 45 50 55 128 } 0 308 }	-3,37 3,21 3,41 3,76 3,38 5,15 5,43 5,71 5,28 6,88 6,87	-4,71 4,68 2,33 4,21 4,91 5,93 6,14 5,78 5,78 6,26 6,79	-3,13 4,04 4,82 5,13 5,73 5,40 5,82 6,78 7,20	-4,58 4,04 3,94 2,96 4,00 4,37 5,40 5,77 5,63 5,63 6,31 6,95 7,27	131 } 0 311 } 0 10 15 20 25 30 35 40 45 50 58 132 } 0	5,29 5,38 5,06 6,31 6,29 5,97 7,25 6,52 7,48 7,32 6,20	-5,21 5,37 5,01 5,76 6,24 6,77 7,03 6,69 7,13 7,96 6,72	2.	-5,40 5,25 5,37 5,03 6,03 6,26 6,37 7,14 6,60 7,30 7,64 6,46 5,93

<sup>\*</sup> Omitted.

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Diam.	No. 1.	No. 2.	No. 3.	Mean.	Diam.	No. 1.	No. 2	No. 8	B. Mean.	Diam,	No. 1.	No. 2.	No. 3.	Mean.
132 )	"	,	"	#	136 )	112	1 "	17	<u> </u>	110	<del> </del>	<del> </del>	#	1 11
312 } 0 5 10 16 20 25 30 35 40 45 50 56	-4,63 4,63 5,05 5,13 7,53 7,97 8,16 7,74 7,54 8,28 8,85	-5,58 5,78 5,61 5,76 6,50 7,30 7,54 6,70 6,98 8,43 7,84		-5,03 5,10 5,20 5.33 6,44 7,01 7,63 7,85 7,22 7,26 8,36 8,34	130	- 5,26 7,23 7,38 7,43 6,75 8,39 8,10 8,42 7,60 6,86 6,48	7,49 6,56 6,86 6,36 6,01 6,86	6,06 7,08 7,24 6,76	6,77 5,81 7,36 6,80 7,14 6,50 7,12 7,36 7,51 7,20 6,62 6,77	6 10 15 20 25 30 35	-1,50 1,05 1,48 0,01 1,85 3,33 3,73 3,78 3,63 4,54 4,54	0,43 1,08 1,52 1,61 2,69 2,71 3,20 3,82 5,00 4,48 4,38	-0,37 2,31 3,19	-1,73 1,01 1,06 1,12 1,26 2,27 2,78 3,46 3,80 3,94 4,51 4,46
10 15 20 25 30 35 40 45 50 55	9,56 8,56 6,93 8,45 8,10 7,26 9,74 8,96 8,93 8,76 8,50	-8,95 8,23 9,58 9,02 7,88 9,46 9,34 9,36 9,88 8,66 7,96	-9,19 8,42 9,76	-9,16 9,25 8,40 8,67 8,73 8,03 8,38 9,54 9,16 9,52 8,06 8,26	137 } 0 5 6 10 15 20 25 30 35 40 45 50 66	- 6.00 6,40 5,54 6.88 6.36 7,39 7,76 7,28 7,33 9,62 8,60	-5,97 5,99 5,55 6,56 7,35 8,31 8,22 7,95 8,51 9,64 8,71	*-4,85 8,26 8,11	- 6,95 5,98 6,20 5,55 6,71 6,86 7,99 7,61 7,98 9,63 8,65	141 } 0 5 10 15 20 25 30 40 45 50 55	5,19 5,05 4,96 6,70 5,88 6,04 6,77 6,29 5,72 6,52 5,82	-6.34 5.96 6.08 6.61 6.16 7.09 6.04 6.27 0.19 5.65 5,35		-5,18 5,76 5,51 6,62 6,66 6,02 6,56 6,41 6,28 5,95 6,08 6,68
10 15 20 25 30 35 40 45 50	-8,18 7,81 6,98 6,35 4,02 4,46 3,90 3,22 2,24 0,59 0,87	-8.41 7.28 7.00 6.65 4.97 6.21 3.02 *1,46 2.36 1,87 1,29	-0476 5,37 4,29 3,34 3,00 2,20	-7,40 8,29 7,64 0,49 6,22 4,79 4,83 3,74 3,28 2,30 1,82 1,45	138 } 0   -6   -10   15   20   25   30   35   40   45   50   56	-10.54 9,61 7,88 8,88 8,68 9.09 9,48 9,23 8.85 8,74 9,10	9,59 8,80 9,20 9,04 8,06 8,69 9,64 9,06 8,92 8,30 7,82	-9,55 8,39 8,72	l li	142 } 322 } 0		-3,81 4,63 5,01 6,11 6,04 6,63 7,09 6,72 6,59 7,07 8,08		-8,00 4,27 4,00 6,34 6,15 5,84 7,16 6,88 7,16 6,65 7,30 8,01
136 } 0   5   6   7   7   7   7   7   7   7   7   7	-2,46 2,32 3.36 3.04 3,05 3,74 4,66 4.30 5,43 4,63 6,23	-1.70 2,63 2,40 2,88 3,55 4,50 6,12 4,68 4,93 5.08 5,08		2,08 2,47 2,87 2,96 3,30 4,16 4,89 4,63 6,18 6,18 6,16 6,77	139 } 0 5 10 15 20 25 30 35 40 45 50 55 140 { 0 320 }	7,44 7,23 8,71 5,56 4,04 6,37 4,08 4 66 4 18 2,55 2,86	-8.06 7,81 7,17 5,69 5,01 4,74 4,14 4,76 3,06 3,17 2,00	-6,68 4,71 3,54	- 8.10 7,75 7,52 7,52 6 62 4,98 6,27 4,11 4,71 3,60 2,86 2,43 1,73	143 } 323 } 0		7,95 7,76 7,01 6,90 7,51 8,52 7,95 7,43 8,10 8,02	7,32 6,63	-8,50 7,13 7,15 6,84 7,39 7,40 8,27 7,70 7,73 8,01 7,69 6,50 6,34

Diam.	No. 1.	No. 2	No. 3.	Mean.	Díam.	No, 1.	No. 2.	No. 3.	Mean.	Diam.	No. 1.	No. 2.	No. 3.	Menn.
0 / 144 } 0   5   10   15   20   25   30   35   40   45   56   56	-5,50 5,92 4,78 3,68 3,78 1,47 1,75 2,17 1,06 0,71 0,33	-6,42 5,50 4,65 4,71 3,05 3,02 1,80 1,67 1,63 0,71 0,98	5,06 3,41 1,03	" -6,34 5,96 5,71 4,83 4,20 3,41 2,63 1,77 1,92 1,24 0,71 0,65	148 \ 0 5 10 15 20 25 30 35 40 46 60 55	7,70 7,79 6,07 7,68 8,07 6,29 8,21 8,60 8,05 9,13 8,12	-8,60 7,59 7,35 7,33 7,48 8,39 7,61 7,70 8,53 7,38 6,72	7,23 7,87 8,14 8,63 6,87	7 -8,21 8,15 7,69 6,88 7,51 7,77 7,52 7,91 8,15 8,24 8,38 7,24	152 \ 332 \ 0 \ 5 \ 10 \ 15 \ 20 \ 25 \ 30 \ 35 \ 40 \ 45 \ 50 \ 55	-5,11 4,94 5,47 4,78 5,71 6,86 6,64 6,74 6,34 8,89 8,54	-5,42 5,20 5,07 4,40 5,84 7,01 7,49 7,04 6,44 7,35 8,01	7,51 7,32 8,46 8,52	" -6,39 5,26 5,07 5,16 4,59 5,77 7,13 7,06 6,89 6,70 8,23 8,36
145 } 0 5 10 15 20 35 40 45 50 55	1,83 2,74 2,61 3,34 4,36	-1,14 1,34 0,85 1,61 1,73 2,60 2,85 2,35 3,15 3,69 3,54		-1,15 1,08 1,00 0,83 1,36 1,78 2,21 2,79 2,48 3,24 4,02 4,01	149 } 0 329 } 0 5 10 15 20 25 30 32 40 46 50 56	7,29 6,82 6,42 5,49 4,57 3,74 2,61 2,82 2,16 1,67	4,30 3,38 3,20 2,97	-2,64 3,08		153 } 0 333 } 0 5 10 15 20 25 30 45 50 56	-8,04 8,46 7,85 7,68 8,59 8,07 8,89 8,37 8,95	-8,49 7,10 7,68 8,84 9,36 7,04 8,21 9,11 9,04 9,35 8,26	-7,65 7,78	-9,28 8,26 7,78 8,02 8,11 8,27 8,26 8,59 9,00 8,70 9,15 8,22
146 } 326 } C 16 16 20 24 30 40 46 56	5, -6,32 5,72 5,49 5,35 6,34 7,53 6,30 6,30 6,40 6,76 6,82	5.79 5,61 6,20 6,45 6,25 6,74 6,05 6,57		4,90 5,84 5,75 5,50 5,77 6,40 6,89 6,52 6,66 6,68 6,30	1 1 2 2 2 3 3 4 4 5	5 —1,90 2,33 5   1,92 0   2,54 5   3,63 0   3,92 5   4,3 5,20 5,20 5,30 1,92 3,4	3 2,45 1,61 1,61 1,07 3 2,27 3,70 4,02 4,89 3,64 4,43	3,3 7 3,3		1 2 2 2 3 3 4 4	5 — 8,13 7,46 5 6,44 0 5,73 6 4,58 0 4,79 5 3,31 0 2,25 5 3,08	8,32 7,86 6,35 5,26 3,12 2,78 1,58 0,78 1,49	6,96 [4,31 1,07	-8,65 8,62 7,89 7,09 6,04 4,92 4,07 3,04 1,91 1,64 1,79 1,18
10 11 20 20 3 3 4 4 4	5 —4,73 4,26 5,13 6,26 7,83 7,93 5 7,93 6,44 0 8,3 7,93 7,93	4,08 4,43 5,63 7,01 8,21 1 8,96 7 8,32 8,24 1 8,18	7,90	5,38 6,63 8,00 8,28 8,14	1 1 2 2 2 3 3 4 4	0	5,27 5,44 7,4,24 3,34,75 5,60 6,22 5,80 6,44 5,7,4	7 3 3 3 3 7 7 0 0	5,07 5,77 5,26 5,21 4,82 5,11 5,44 6,18 5,84 5,93 6,79 6,55	2 2 3 3 4 4 5 5 5 5	5 1,08 1,87 2,61 0 1,49 5 2,80 2,79 3,71 0 3,49 5 3,52 0 4,23 5 5,49	1,24 1,43 1,74 1,55 1,94 3,32 3,07 2,374 4,22		-1,03 1,27 1,56 2,02 1,61 2,17 2,37 3,51 3,28 3,63 4,22 5,80 5,29

Diam.	No. 1.	No. 2.	No. 3.	Mean.	Diam.	No. 1.	No. 2.	No. 3.	Mean.	Diam.	No. 1.	No. 2.	No. 3.	Mean.
156 } 336 } 0 5 10 15 20 25 30 35 40 45 50 55	5.44 6,18 *7,74 5,42 5,12 *7,40 4,78 5,25 7,25 8,28 6,60	- 5,62 6,75 5,83 5,62 5,72 5,03 6,78 6,60 6,57 6,25 5,83	5,10 5,61 6,76 5,88 6,49 6,31	- 5,29 5,53 6,46 6,83 6,52 5,42 5,51 5,72 6,20 6,57 7,01 6,25	160 } 340 } 0 5 10 15 20 25 30 35 40 45 50 56	0,34 0,50 0,31 0,98 1,60 1,63 3,84 4,01 3,30 4,48 4,70	-1,69 0,99 0,88 0,98 1,56 2,73 3,19 3,26 4,05 3,20 5,08		7 -0,99 1,01 0,74 0,60 0,98 1,68 2,18 3,51 3,03 3,87 3,84 4,89	184 } 0	-5,31 4,95 4,89 4,33 3,70 3,82 2,24 2,19 1,90 1,14 0,83	-6,04 5,22 4,52 3,65 4,04 2,54 2,04 1,80 1,70 0,91 0,38	4	-6,56 5,67 6,08 4,70 3,99 3,87 3,18 2,14 2,00 1,80 1,02 0,61
157 } 337 } 0 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	-5,61 4,57 4,20 5,37 5,38 6,64 7,46 7,65 6,08 8,24 7,11	5.71 5,71 5,19 4,87 6,23 7,32 7,30 7,22 7,26 7,89 7,70	4,32 7,28 7,20	- 6.51 5.66. 5.14 4.57 5.12 5.30 7.08 7.38 7.44 6.83 8.06 7.43	161 } 341 \$ 0 5 10 15 20 25 30 35 40 45 50 65	-5,27 5,88 5,37 5,09 5,60 5,44 5.82 5,09 5,40 4,81 4,37	5,72 5,63 5,61 6,39 4,94 5,57 6,22 5,79 6,52 6,68 6,65		-5,31 5,49 5,75 5,49 6,24 5,27 5,50 6,02 5,89 6,48 5,24 5,01	165 } 345 } 0 5 10 15 20 25 30 35 40 46 50 55	-0,56 1,54 0,93 1,14 0,91 2,79 3,13 2,50 2,65 3,43 3,89	-1,44 1,36 1,00 1,25 1,38 1,44 2,17 2,32 1,62 3,28 3,80	0,85	-0,32 1,00 1,45 0,93 1,20 1,14 1,82 2,65 2,41 2,21 3,35 3,84
158 } 0 5 5 10 15 25 30 35 40 45 50 55	6,48 6,71 8,11 7,83 8,31 9,05 0,31	0,81 7 66 7,82 7,49 7,41 7,28 7,81 8,93 8,13 16,47 9,30	<u>10,49</u>		162 } 0 5 10 15 20 25 30 35 40 45 50 55	-3,57 3,77 4,08 4,13 5,60 6,54 5,99 5.08 6,30 7,34 6,72	-4,51 4,64 3,95 4,53 5,99 5,68 6,79 7,13 5,82 7,51 7,41		-4,77 4,04 4,21 4,02 4,33 5,80 6,11 6,39 6,55 6,08 7,42 7,08	166 } 0 6 10 15 20 25 30 40 45 50 55	-4,96 4,02 4,74 5,11 5,41 4,22 4,67 4,03 4,65 3,08 3,82	-5,08 5,45 8,05 5,40 5,48 5,10 4,65 4,85 4,69 4,31 3,52	-5,01 5,52 5,07	-4,31 5,02 5,18 5,27 5,25 5,44 4,95 4,61 4,44 4,80 4,14 3,67
169 } (339 } (34)	7,30 7,20 0,88 0, 6,27 5, 4,07 0, 6,10 5, 3,76 0, 3,10 5, 2,60 0,03 5, 1,24	6,36 0,39 5.00 4,89 3,39 3,60 1.70	6,8 3 3 3 3 3 3 3 8	7,59 8,02 7,51 6,02 5,83 4,87 5,02 3,57 3,42 2,18 1,35 1,36 0,99	20 25 30 35 40 45 50	7,27 7,14 6,83 6,81 7,40 7,21 6,87 7,53 7,74 7,72 6,69	7,25 6,91 6,79 6,64 6,82 7,48 7,22 7,89 7,07 7,99		-7,90 7,26 7,02 6,81 6,73 7,11 7,36 7,05 7,71 7,40 7,85 6,90 6,66	107 } 347 } 0 5 10 15 20 25 30 45 40 45 188 } 0 348 }	-3,24 3,18 3,74 3,99 5,33 5,05 6,85 8,70 5,61 7,23 6,99	-4,71 3,29 3,06 4,10 4,97 4,45 5,00 6,40 7,23 7,57 6,95		3,97 3,22 3,67 4,04 5,16 5,39 5,42 6,55 6,66 7,40 6,97 7,86

Diam.	No. I.	No. 2.	No. 3.	Mean	Diam.	No. 1.	No. 2.	No. 3.	Mean.	Diam.	No. 1.	No. 2.	No. 3.	Mean.
168 } 348 } 0 5 10 15 20 25 30 35 40 45 50 55	-7,80 8,50 6,92 6,59 7,50 7,33 7,41 7,47 6,94 7,75 7,07	-7,35 6,59 6,37 6,58 7,32 8,33 7,61 7,46 8,48 0,95 7,02	-6,74 7,01 7,53 6,85	7,86 7,30 7,37 6,94 6,58 7,41 7,50 7,51 7,46 7,43 7,43 7,35	172 352 0 5 10 15 20 25 30 35 40 45 50 55	4,26 3,94 2,80 4,03 4,72 5,69 4,94 4,96 0,27 6 14 6,69	3,24 3,61 4,49 4,44 5,41 4,76 4,67 3,92 4,48 6,95 7,18	3,59 5,96 5,08	4,72 3,75 3,77 3,63 4,24 5,06 5,47 4,80 4,44 5,28 6,64 6,88	176 } 356 } 0 5 10 15 20 25 30 35 40 45 50 55	-3,67 4,03 2,85 4,88 4,14 3,33 5,28 5,01 2,56 2,56 2,92	3.52 3,53 4,97 4,20 4,97 4,73 4,06 4,08 3,38 3,34 2,59		-3,17 3.60 3.78 3,73 4.54 4,55 4,14 4,67 4.54 3,25 2,95 2,75
169 } 349 } 0 5 10 15 20 25 30 35 40 45 50	4,87 4,22 2,61 2,83 2,14 1,22 1,14	6,85 5,86 5,39 3,54 3,31 3,64 2,40 1,93 1,89 1,47 0,84		-6,69 6,66 5,75 4,82 4,20 3,70 3,12 2,61 2,04 1,55 1,30 0,86	173 } 0 5 5 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5	4,89 6,09 5,81 7,02 5,34 6,04 6.19	6,09 6,34	5,80 6,59 5,18 6,81	4,87 6,35 5,80 6,95 6,09	16 20 20 30 36 40 40	-1,96 2,34 2,41 3,53 3,94 3,80 3,93 5,27 5,18 5,92	5.26 *3,91 6,26	5,04	-3,03 1,84 2,30 2,47 3,51 3,75 4,15 4,15 4,34 5,26 5,45 0.98 5,75
170 } 350 } 0 8 10 12 20 30 30 40 44 50	4 0,61 4 0,25 5 —0,32 1,03 0,79 3,35 2,47 0 3,49 3,51 3,93	+0.30 -0.19 1,18 1,97 3,86 3,96 2,69 3,27	700	+0,22 +0.58 +0.26 -0,01 0.61 0.99 2,66 3.16 3,72 3,10 3,60 3,88	174 } 354 } 0 10 10 10 10 10 10 10 10 10 10 10 10 1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	4,2 4,1 3,5 2,7 2,4 1,6 0,0 0,6 1 + 0,6	5,86 7 1 1 2 3 3 0.63 9 1,29 4 2 + 0,55	3,9 3,9 3,7 2,8 2,0 0,5 0 0,4 0,2 0 1 0,8	2 1 1 1 3 2 4 4 4 5 5	5,79 5,26 5,92 5,79 5,79 5,60 5,60 5,78 6,53 5,09 5,78	3 4,9 4,8 4,4 4,7 4,7 5,8 6,2 5,2 4,7	4	- 6,37 5,60 5,10 5,43 5,38 5,37 6,08 6,02 6,21 4,97 4,20
171 } 351 } 10 11 20 2 3 3 4 4 4 5 172 } 352 }	5 —4.15 4.89 5,25 6,08 5,07 0 6,02 6,02 5,03 5,26 5,26 5,26 5,26	5,71 5,63 5,33 3,77 5,56 5,14 4,97 5,74 5,69	-5,95 4,8 <i>t</i>	5 4,56 5,11 5,31 5,49 5,50 5,80 5,09 4,72	10	5 + 0.96 + 0.27 5 + 0.52 - 0.68 5   0.66 0.96 1.62 1.62 1.63 1.63 2.04 2.55	+ 1,3 + 0,3 - 0,5 0,5 1,4 2,7 2,2 2,1 2,2	1 2 9 9 1 1 6 6 4 1 0 8 1	+ 1,45 + 0.79 + 0.63 - 0.63 1,2 2.20 2,05 1,9 2,15 2,3	1 1 2 2 3 3 3 3 4 4 4 5 5	5	5.8 4,0 3,4 2,5 7 2,2 1,8 + 0.0 8 - 0.8 9	0 4,60 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	4,99 4,10 3,29 2,74 2,43 1,77 0,49 0,94

<sup>·</sup> Omitted.

If we now combine the errors for the diameters 0°-180°, 0° 5'-180° 5' &c. with those for 90°-270°, and 90° 5'-270° 5 &c. we obtain

A table of corrections for error of Division to be applied to the mean of the four microscopes.

Diameters 0 - 180 1 181 2 182 3 183		5'	10′	15'	20'	25	30		نم، ا	II	I .	I .	1 .
0 — 180 1 181 2 182	-0,31	1		[1	<u> </u>	20	20,	35′	40′	45'	50"	55′	Diameters.
4 184	<b>5,</b> 30 <b>8,</b> 38	-0,46 4,41 5,07 7,89 7,06	7,46 6,51	-0,33 4,40 4,81 6.80 6,23	-1,10 4,85 5,22 7,00 5,46	-1,42 4,40 5,50 6,91 4,81	-1,91 5,22 6,75 7,38 3,96	-2,39 6,44 7,04 7,66 3,47	-2,25 5,33 6,54 7,57 2,91	-2,62 5,41 0,61 8,31 1,97	-3,18 5,58 7,60 8,46 1,58	-3,95 5,44 8,14 7,68 0,91	90-270 91 271 92 272 93 273 94 274
5 185 6 186 7 187 8 188 9 189	4,37 4,80 7,36	1,15 5,39 4,33 6,71 6,45	1,48 5,26 4,31 6,63 5,55	2,20 5,12 4,36 6,55 4,93	2,60 5,23 4,83 6,66 3,85	3,07 5,62 5,33 6,51 3,66	2.82 5,50 5,86 6,87 3,51	3,28 5,79 5,62 7,40 2,65	3,25 5,41 5,75 7,45 2,44	3,43 5,12 6,33 7,73 2,09	3,98 4,74 6,19 7,45 1,61	4.04 4,67 6,16 7,12 1,16	95 275 98 278 97 277 98 278 99 279
10 190 11 191 12 192 13 193 14 194	0,87 4,71 5,29 8,41 7,16	1;48 4,90 4,53 8,01 7,18	1,53 4,79 4,10 7,88 6,17	0.73 4,80 4,51 7.25 5,95	1,23 4,81 4,98 7,19 4,40	2,14 5,19 5,20 7,22 3,81	2,72 5,48 5,90 7,84 3,35	3,23 5,82 6,15 8,01 2,72	2,96 5,82 6,66 7,88 2,23	3,18 5,57 6,59 7,93 2,13	3,91 5,49 7,48 7,86 1,64	4,45 5,30 7,58 7,10 1,57	100 280 101 281 102 282 103 283 104 284
15 195 16 198 17 197 18 198 19 199	0 39 4,57 5,62 8.01 6,54	0,35 4,88 5,35 7,48 5,98	0,53 4,98 4,92 7,40 5,92	0.62 4.35 5,17 6,90 5,36	1,80 5,12 5,18 6,66 5,21	2,16 4,96 5,80 7,40 4,35	3,23 5,63 6,40 7,60 3,67	3,46 5,72 6,95 8,07 2,98	3,91 5,89 6,90 7,68 2,54	3,56 5,92 6,78 7,43 2,22	3,95 5.80 7,50 7,43 1,88	3,85 5,35 7,15 6,31 1,06	105 285 106 286 107 287 108 288 109 289
20 200 21 201 22 202 23 203 24 204	0,48 4.80 5,53 8,82 7,08	0.45 5,27 5,10 8,83 6,82	0;64 5,06 5,06 8,43 6,12	0;77 5,32 5,40 8,80 5,67	1,73 5,40 5,05 8,52 5,01	1,98 5,68 6,70 8,24 4,54	2,48 5,44 6,64 7,85 3,67	2,56 6,43 7,42 7,81 3,40	3,08 6,69 7,42 7,92 2,51	2,93 6,57 7,24 8,27 2,10	3,21 6,07 7,92 8,25 1,70	4,17 5,68 7,75 7,61 1,35	10   290   11   291   112   292   113   293   114   294
25 205 28 206 27 207 28 208 29 209	0,70 4,15 5.23 8,08 7,40	0,50 4,83 4,82 8,67 7,31	0.91 4,79 4,68 8,11 7,05	0,87 4,75 5,00 7,78 5,82	1,15 5,18 5,53 7,77 5,42	1.58 4,86 5,88 7,91 4,34	1,97 5,11 7,24 8,10 3,79	2.77 5,53 7.36 8,32 2,85	2,81 5,81 7,21 8,59 2,63	2,73 5,86 6,76 8,24 1,88	3,02 5,55 7,79 8,47 1,04	3,58 5,15 7,78 7,80 0,97	115 295 116 296 117 297 118 298 119 299
30 210 31 211 32 212 33 213 34 214	0,97 3,97 4,85 7,90 8,83	1,16 4,98 4,41 7,21 6,67	1,40 4,62 4,27 0,93 0,11	1,22 4,53 4,16 8,46 5,77	2,08 4,52 5,00 6,64 4,82	2 26 4.60 5,23 6,65 4,18	2,35 4,64 5,74 7,12 3,49	2,96 4,95 6,08 7,65 3,18	3,01; 4,97 6,26 7,48 2,39	2,18 5,00 6,51 7,82 2,12	2,57 5,11 7,01 7,73 1,79	3,47 4,82 7,15 7,15 1,21	120 300 121 301 122 302 123 303 124 304
35 215 30 216 37 217 38 218 39 219	0,80 4,46 5,01 7,86 0,51	0,34 4,37 4,50 7,29 6,38	0,47 4,81 4.52 6,58 5,79	0,55 4,92 3,75 6,63 5,40	1,62 5,00 4,72 6,87 5,01	1,39 5,27 5,23 6,73 4,03	1,99 5,67 5,85 7,06 4,09	2,90 5,21 8,10 7,70 8,32	2,72 5,38 6,55 7,23 2,47	3,00 5,80 6,35 6,92 2,44	3,11 5,36 7,29 7,22 1,48	7.48 6,62	125 305 126 308 127 307 128 308 129 309
40 220 41 221 42 222 43 223 44 224	0)81 5,06 5,79 8,20 6,48	1,27 4,86 5,14 7,97 0,91	1,60 5,42 5,15 7,39 6,32	1,20 5,29 4,76 7,33 5,80	2,23 6,18 4,83 7,31 5,26	2,39 6,08 5,90 6,71 4,26	2,86 6,40 6,27 7,12 3,85	3,71 8,57 6,75 8,13 2,98	4,00 6,37 6,23 8,01 2,69	4,14 8,69 8,26 8,39 1,78	4,18 8,54 7,34 7,75 1,50	4,71 5,92 7,41 7,37	130: 310 131: 311 132: 312 133: 313 134: 314

Diameters.	0'.	5'	10'	15'	20'	25'	30'	35'	40′	45'	50′	55'	Diame	ters.
45—225 46 226 47 227 48 228 49 229	-0,87 4,92 6,14 9.08 6,70	-0,96 5,45 5,36 8,94 7,01	-1,48 6,39 5,56 8,26 6,42	-1,80 6,47 5,15 8,09 5,83	-2,25 6,5:1 6.00 8,13 4,70	-2,61 5,88 6.08 7,80 4,07	-3,20 6 41 7,19 8 05 3,79	7 -3,92 6,69 7 18 8.45 3,04	-3,70 6,80 7,51 8,54 3,25	-4,32 6,73 7,45 8,28 2,42	-4,62 6,14 8,67 7,78 1,88	-5,09 5,81 7,84 7,40 1,69	135— 136 137 138 139	315 316 317 318 319
50 230 51 231 52 232 53 233 54 234	1,07 5,05 5,25 8,22 6,54	0,96 5,01 4,16 7,41 6,10	1,33 5.01 4,15 7,56 5,84	1,37 5,22 4,60 7,15 5,43	1,86 5,87 5,36 7,60 5,08	2,38 5,45 5,29 7,60 4,06	2,67 6,83 6,69 8,14 3,28	3,37 5,79 6,87 8,04 2,33	3,52 5,12 6,92 8,22 2,36	3,59 5,42 6,70 8,21 1,96	4,10 5,17 7,47 7,81 1,25	4,51 6,14 7,83 6,81 1,08	140 141 142 143 144	320 321 322 323 324
55 235 56 236 57 237 58 238 59 239	1,10 4,85 ,4.95 8,43 7,06	1,10 5,30 4,46 7,82 6,76	1.20 5,42 4.00 7,47 6,10	1,03 4,98 4,13 7,09 5,64	1,44 5,25 5,19 7,42 5,00	1,82 5,27 6.03 7.65 4,34	2,02 5,58 6,84 7,50 3,56	2,93 5,41 7,42 7,90 2,71	2,65 5,42 7,43 8,15 2,46	3.32 5,61 7,09 8,13 2,03	4,04 5,73 7,80 8,15 1,87	4,09 5,29 7,58 7,22 1,56	145 146 147 148 149	325 326 327 328 329
60 240 61 241 62 242 63 243 64 244	1,76 5 43 6,27 8,74 7,92	1,81 5,74 5,47 8,07 7,99	2,25 5,60 5,05 7,76 7,32	1.96 5,51 5,17 7,85 6,52	2,84 5,70 5,30 8,02 5,68	3,12 5,72 5,94 7,82 5,08	3.95 5.98 6.84 7.92 4,42	4,44 6,74 6,60 8,40 3,62	4,62 6,45 6,85 8.64 2,86	4,36 6.10 6,65 8,61 2,78	4,48 6,70 7,69 8,48 2,43	5,14 6,26 7,74 7,65 1,65	160 161 152 153 154	330 331 332 333 334
65 245 66 246 67 247 68 248 69 249	1,29 5,85 6,70 9,00 7,76	1.71 6.26 5.70 8.08 7,86	1,57 6,90 5,34 7,80 7,49	1,82 6,48 5,35 8,05 6,80	1,92 6,42 6,00 7,07 6,09	2,73 6,02 6,57 7,58 5,01	3,29 6,53 8,11 8,18 5,03	3,86 6,42 7,98 8,63 3,39	6.63 8,01 8,98	4.08 6,94 7,57 9,02 2,95	4,59 6,84 8,62 9,84 2,52	5,77 6,92 8,16 8,63 1,83	156 156 157 158 159	33 <i>5</i> 336 337 338 339
70 250 71 251 72 252 73 253 74 256	5,40 5,34 8,52	1,29 6,25 4,98 7,77 6,70	1.70 6,25 4,46 7,68 5,83	1.61 6.09 4.46 7.22 5,86	2,27 5,72 5,02 7,06 4,85	2,61 6.00 5,93 7,23 4,81	3,22 6,02 6,58 7,64 4,08	6,16 7,08 7,89	8,09 6,95 8,23	6,11 6,61 8,45	5,98 7,88 8,69	5,49 5,71 7,43 7,68 1,03	163	342 343 344
75 256 76 256 77 25 78 256 79 25	5 4,74 5 29 8 8,21	1,24 4,93 4,26 7,45 6,54	1,50 5,45 4,07 7,11 5,85	1,15 5,32 4,05 6,97 \$5,26	1,51 5,83 4,71 8,65 4,84	1,75 5,71 5,25 7,23 4,11	2,09 5,58 6,15 7,63 3,46	5.70 6,34 7,95	5 7,10 7 7,96	6,85 7,93	4,76 7,74 8,07	4,27 4,43 7,47 7,24 1,17	165 166 167 168 169	345 346 347 348 349
80 26 81 26 82 26 83 26 84 26	4.70 2 4.80 3 7,77	+0,48 -6,13 3,87 7,04 6,17	0,07 5,23 4,04 7,09 5,03	0,52 5,39 3,78 6,84 4,86		1,23 5,71 4,81 7,09 3,83		5,37 5,50 7,79	5,49 5 5,49 7,50	6,76 6,00 7,40	5,93 6,72 7,18	4,20 5.01 7,14 6,53 0,48	171 172 173 174	353
85 26 86 26 87 26 88 26 89 26	3,60 7 3,86 8 7,04	6,47	5,88	4,24 3,25 6,16	4.84 3,92 6,12	4,48 6.07	4.40 5,05 6,40	4,93 4,86 6,7	3 4,48 5 5,50 8 7,29	4,16 5,60 7,31	4,08 6,45 6 63	3,81 6,42 5,71	176 177 178	356 357 358

With regard to the amount of error attaching to the measures of North Polar Distance hitherto given; the case stands thus: each result requires to be corrected by the values set down in the table, and then to be further corrected by the error of the Index Error. If every division of the circle had been

employed, this latter error would amount to-4,"9 and we should have.

A table of corrections due to the ALREADY REDUCED measures of N. P. D. for error of division.

Diameters.	0′	5'	10'	18′	20'	25'	30′	35'	40′	45′	50'	55'	Diameters.
0 0 0 - 180 1 181 2 182 3 183 4 184	+4,59 0,87 -0,40 3,48 2,37	+4,44 0,49 -0,17 2,99 2,16	+4,58 0,55 0,28 -2,56 1,61	+4,57 0,50 0,09 -1,90 1,33	+3.80 0,05 -0,32 2,10 0,56	+3,48 0,50 -0,60 2,01 +0,09	72,99 -0,32 1,85 2,48 +0,94	+2,51 -0,54 2,14 2,76 +1,43	4-2,65 -0,43 1,64 2,67 +1,99	$\begin{array}{c c} * \\ +2,28 \\ -0.61 \\ 1,71 \\ 3.41 \\ +2,03 \end{array}$	+1,72 -0,68 2,70 3,66 +3,32	+0,95 -0,54 3,24 2,78 +3,99	90-270 91 271 92 272 93 273 94 274
5 185 6 186 7 187 8 188 9 189	+4,27 0,63 0,10 -2,46 1,20	+3,75 -0,49 +0,57 -1,83 1,50	+3,42 0,36 +0,59 1,63 0,65	+2,70 -0,22 +0,54 -1,65 0,03	+2,30 $-0,38$ $+0,07$ $-1,76$ $+1,05$	+1.83 $-0.72$ $-0.43$ $-1.61$ $+1.24$	+2,08 -0,60 -0,96 -1,77 +1,39	+1,62 -0,89 0,72 2,50 +2,25	+1.65 $-0.51$ $0.85$ $2.55$ $+2.46$	+1,47 -0.22 0,43 2,83 +2,81	+0,92 0,16 -1,29 2,55 +3,29	+ 0,86 0,33 -1,26 2,22 +3,74	95 275 96 276 97 277 98 278 99 279
10 190 11 191 12 192 13 193 14 194	+4,03 0,19 -0,39 3 51 2,26	+3,42 0,00 0,37 -3,11 2,26	+3.37 0,11 0 80 -2;78 1,27	+4,17 0,10 0,39 -2,35 1,05	+3,67 0,09 -0,08 -2,29 +0,50	+2,76 -0,29 0,30 2,32 +1,09	+2,18 -0,58 1,00 2,94 +1,55	+1,67 -0,92 1,25 3,14 +2,18	+1,94 -0,92 1,76 2,98 +2,67	+1,72 -0.67 1.69 3,03 +2,77	+0,99 -0,59 2,56 2,96 +3,26	+0,45 -0,40 2,68 2,20 +3,33	100 280 101 281 102 282 103 283 104 284
15 195 16 196 17 197 18 198 19 199	+4,51 0,33 -0,72 3,11 1,64	+4.55 0,02 -0,45 2,58 1,08	+4,37 -0,08 0,02 2,50 1,02	+4.28 0,65 -0,27 2,00 0,46	+3,10 -0,22 0,28 1,76 0,31	+2,74 -0,06 0,90 2,50 +0,65	+1,67 -0,63 1,50 2,70 +1,23	+1,44 -0,82 2,05 3,17 +1,92	+0.99 -0.99 2.00 2.76 +2.36	+1,34 -1,02 1,88 2,53 +2,68	+0,95 -0,90 2,60 2,53 +3,02	+1,05 -0,45 2,25 1,41 +3,86	105 285 106 286 107 287 108 288 109 289
20 200 21 201 22 202 23 203 24 204	+4,44 0,10 -0,63 3,92 2,18	+4,45 -0,37 0,20 3,93 1,92	+4,26 -0,16 0,16 3,53 1,22	+4,13 -0,42 0,50 3,90 0,67	+3,17 -0,50 0,15 3.62 0,11	+2,92 -0,78 0,80 3,34 +0,36	+2,42 -0,54 1,74 2,95 +1,23	+2,34 $-1,53$ $2,52$ $2,91$ $+1,50$	+1,84 -1,79 2,52 3,02 +2,39	4-1,97 -1,67 2,34 3,37 +2,80	+1,69 -1.17 3,02 3,35 +3,20	+0,73 -0,78 2,85 2,71 +3,55	110 290 111 291 112 292 113 293 114 294
25 206 26 206 27 207 28 208 29 209	+4,20 0,75 -0,33 3,78 2,50	+4,40 0,27 0,08 -3,67 2,41	+3,99 0,11 0 22 -3,21 2,15	+4.03 0,16 -0,10 2,88 0,92;	+3,75 -0,28 0,63 2,87 0,52	+3,32 0,04 -0,98 3,01 +0,56	+2,93 $-0,21$ $2,34$ $3,20$ $+1,11$	+2,13 0,63 2,46 3,42 +2,05	+2,09 -0,91 2,31 3,69 +2,27	+2,17' -0,76 1,86 3.34 +3,02	+1,88 0,65 2,89 3,57 +3,86	+1,32 -0,25 2,88 2,90 +3,93	116 295 116 296 117 297 118 298 119 299
30 210 31 211 32 212 33 213 34 214	+3,93 0,93 0,05 -3,00 1,93	+3,74 -0,06 +0,49 -2,31 1,77	+3 50 0,28 0,63 -2,03 1,21	+3,68 0,37 0,74 -1,56 0,87	+2,82 0,38 -0.10 1,74 +0,08	+2.64 0,30 -0,33 1,75 +0,72	+2,55 0,26 -0,84 2,22 -1,41	+1,94 -0,05 1,18 2,65 +1,72	+1.89 -0,07 1,36 2,58 +2,61	+2.72 $-0.10$ $1.61$ $2.92$ $+2.78$	$^{+2,33}_{-0,21}$ $^{2,11}_{2,83}$ $^{+3,11}$	$\begin{array}{c} +1,43 \\ +0.08 \\ -2,25 \\ 2,25 \\ +3,69 \end{array}$	120 300 121 301 122 302 123 303 124 304
35 215 36 216 37 217 38 218 39 219	+4,04 +0,44 0,11 2,96 1,61	+4,56 0,53 +0,40 -2,39 1,48	+4.43 0,09 0,38 1,68 0,89	+4,85 -0,02 +1,15 -1,73 .0.50	+3,28 -0,10 +0,18 -1,97 0,11	+3,51 -0,37 0,33 1,83 +0,87	+2,91 -0,67 0,95 2,16 +0,81	+2,00 -0,31 1,20 2,80 +1,58	+2,18 -0,48 1,65 2,33 +2,43	+1.90 -0.90 1,45 2.02 +2,46	+1,79 -0,46 2,39 2,32 +3,42	+0,52 0,08 -2,58 1,72 +3,75	125 305 126 306 127 307 128 308 129 309
40 220 41 221 42 222 43 223 44 224	+4.09 -0,16 0,89 3,30 1,58	+3.63 0,04 -0,24 3,07 2,01	+3,30 -0,52 0,25 2 49 1,42	+3,70 -0,39 +0,14 -2,43 0,90	+2,67 -1,26 +0.07 -2,41 0,36	+2,51 -1,18 1,00 1,81 +0,64	+2,04 -1,60 1,37 2,22 +1,05	+1,19 -1.67 1,85 3,23 +1,92	+0,90 $-1,47$ $1,33$ $3,11$ $+2,21$	+0,76 -1,79 1,36 3,49 +3,12	+0.72 $-1,64$ $2,44$ $2,85$ $+3,40$	+0,19 -1.02 2,51 2,47 +3,58	130 310 131 311 132 312 133 813 134 314

A table of corrections due to the ALREADY REDUCED measures of N. P. D. for error of division.

Diam	eters,	0′	5′	10,	157	20′	25'	30′	35'	40'	45'	50"	55*	Diame	eters.
45- 46 47 48 49	-225 226 227 228 229	+4,03 -0 02 1,24 4.18 1,80	+3,94 -0,55 0,46 4.04 2,11	+3,42 -1.49 0 66 3,36 1,52	+3,10 -1,67 0,25 3,19 0,93	+2.65 -1.64 1.10 3,23 +0,20	+2,29 -0,98 1,18 2,90 +0,83	*/ +1,70 -1,51 2,29 3,15 +1,11	# 0,98 1,79 2,28 3.55 -+ 1,86	+1,20 -1,90 2,61 3,64 +1,65	+0,58 -1,83 -2,55 3,38 +2,48	1,0,28 -1,24 3,77 2,88 +3,02	"0,19 0,91 2,94 2,50 +3,31	135— 136 137 138 139	315 316 317 318 319
50 51 52 53 54	230 231 232 233 234	+3,83 -0,15 0,35 3,32 1,64	+3.94 $-0.11$ $+0.74$ $-2.51$ $1.20$	+3,57 -0,11 +0,75 -2,66 0,94	+3,53 -0,32 +0,30 -2,25 0,53	+3,04 0,97 0,46 2,70 0,18	+2,52 -0,55 0,39 2,70 +0,84	+2,23. -0,93 1,79 3,24 +1,62	+1,53 -0,89 1,97 3,14 +2,57	+1,38 -0,22 2,02 3,32 +2,54	+1,31 -0,52 1,80 3,31 +2,94	+0,80 -0,27 2,57 2,91 +3,65	+0,39 -0,24 2,93 1,91 +3,82	140 141 142 143 144	320 321 322 323 324
55 56 57 58 59	235 236 237 238 239	+3,80 0,05 -0,05 3,53 2,16	+3,80 -0,40 +0,44 -2,92 1,86	+3,70 -0,52 +0,90 -2,57 1,20	+3,87 -0,08 +0,77 -2,10 0,74	+3,46 -0,35 0,29 2,52 0,10	+3,08 -0,37 1,13 2,75 +0,56	+2,88 -0,68 1,94 2,60 +1,34	+1,97 $-0,51$ $2,52$ $3,00$ $+2,19$	+2,25 $-0,52$ $2,53$ $3,25$ $+2,44$	+1.58 -0.71 2,10 3,23 +2,87	-1-0,86 0,83 2,90 3,25 -1-3,03	+0,81 -0,39 2,68 2,32 +3,34	145 146 147 148 149	325 326 327 328 329
60 61 62 63 64	240 241 242 243 244	+3,14 -0,53 1,37 3,84 3,02	- -3,09 0,84 0,57 3,17 3,09	+2,65 -0,70 0,15 2,86 2,42	+2,94 -0,61 0.27 2,95 1,62	+2,06 0,80 0,40 3,12 0,78	+1,78 -0,82 1,04 2,92 0,18	+0,95 -1,08 1,94 3,02 +0,48	+0.46 -1,84 1,70 3,50 +1,28	+0,28 1,55 1,95 3,74 +2,04	+0,54 -1,20 1,75 3,71 -1-2,12	+0,42 -1,80 2,79 3,58 +2,47	-0.24 1,36 2,84 2,75 +3,25	150 151 152 153 154	330 331 332 333 334
65 66 67 68 69	245 246 247 248 249	+3,61 -0,95 1,80 4,10 2,86	+3,19 -1,36 0,80 3,18 2,96	+3,33 -2,00 0,44 2,90 2,59	+3.08 -1.58 0.45 3.15 1,90	+2.98 -1,52 1,10 2,17 1,19	+2,17 -1,12 1,67 2,68 0,11	+1.61 -1.63 3.21 3.28 0,13	+1,04 1,52 3,08 3,73 +1,61	+1,06 -1,73 3 11 4,08 +1,72	+0.82 -2.04 2.67 4.12 +1.05	+0.31 -1,94 3,72 4.94 +2,38	-0.87 2,02 3,26 3,73 +3,07	155 156 157 158 159	335 336 337 338 330
70 71 72 73 74	251 252 253	+3,46 -0,50 0,44 3,62 2,47	+3,61 -1,35 0,08 2.87 1,80	+3,20 -1,35 +0,44 -2,78 0,93	+3,29 -1,19 +0,44 -2,32 0,96	+2,63 -0.82 0,12 2,16 +0,05	+2,29 -1,10 1,03 2,33 +0,09	+1.68 -1,12 1.08 2,74 +0,82		$ \begin{array}{c c} -1.19 \\ 2.05 \\ 3.33 \end{array} $	+0,64 -1,21 1,71 3.55 - -2,52	+0,13 -1,08 2,98 3,79 +3,25	-0,59 0,81 2,53 2,78 +3,87	160 161 162 163 164	340 341 342 343 344
75 76 77 78 79	256 257 258	+4,22 0,16 -0,39 3,31 1,90	+3,66 -0,03 +0,64 -2.55 1,64	+3,40 -0,55 +0,83 -2,21 0,95	+3.75 -0,42 +0,85 -2,00 0,36	+3,39 -0,93 +0,19 -1,75 +0,00	+3,15 -0,81 0,35 2,33 +0,79	+2,81 -0,68 1,25 2,73 +1,44	1,45 3,07	$ \begin{array}{r r} -0.45 \\ 2.20 \\ 3.06 \end{array} $	+2.19 -0.25 1,95 3,03 +2,99	+1,15 0,14 -2,84 3,17 +3,36	+0,63 0,47 -2,57 2,34 +3,73	165 166 167 168 169	345 346 347 348 349
80 81 82 86 86	261 262 3 263	0,20 0,10 2,87	+5,38 -0.23 +1,03 -2,14 1,27	+4,83 -0,33 +0,86 -2,19 -0,13	-4,38 -0,49 +1,12 -1,94 +0,04	+3,71 -0,50 +0,80 -1,36 +0,47		+2,34 -0.52 0,62 2,22 +1,74	-0,47 0,66 2,89	-0,59 0,59 2,60	+1,48 0,86 1.10 2.50 3,61		+0.70 -0.11 2,24 1,62 +4,42	170 171 172 173 174	350 361 352 353 354
8 8 8 8	6 266 7 267 8 268	1,30 1,04 -2,14	1.57	2,00	+4,31 0,66 1,65 -1,26 +0,23	+3,70 0,06 0,98 -1,22 +0,70	0,01 0,42 1,17	$\begin{bmatrix} 0.50 \\0.15 \\ 1.50 \end{bmatrix}$	-0.03 +0.05 -1.88	0,42 -0,60 2,32		0,82 1,55 1,73	-1,52 0.81	177	355 356 357 358 359

It must here be carefully noted with regard to the two preceding tables, that the signs + and — are to be understood in the sense of North and South respectively, and not of addition and subtraction.

In order to shew how nearly the above corrections can satisfy observations made at Madras with those made at other Observatories I have selected from Vol. II. all the cases of large difference between the North Polar Distances there given and the Greenwich observations, and have applied the corrections due to error of division as follows.

A table, exhibiting all the large differences yet met with between the Greenwich and Madras determinations of North Polar Distance (i. e. all above 4"), together with the same corrected for error of division in the Madras Circle.

				<u></u>	<u> </u>
No. in Vol. II.	Names,	Division from Observed. Green-wich.	err, div,	Cor, diff from Green- wich	Remarks.
41 59 162 178 217	15 Cassiopeæ κ 31 Andromed, δ 98 Piscium μ 102 π 59 Ceti υ <sup>2</sup>	28 0 — 4,32 60 5 + 5,37 84 45 + 8,33 78 45 — 5,65 111 55 —11,09	+ 3,78 - 3,09 - 3,61 + 3,03 + 0,78	$ \begin{array}{c c}  & 0.54 \\  & + 2.28 \\  & + 4.72 \\  & - 2.62 \\  & -10.31 \end{array} $	Greenwich place for \$\begin{aligned} 1831, \\ 1837, \\ differs & 1,86 \\ \end{aligned}\$  Greenwich place for 1831,
269 280 399 630 645	78 Ceti v 83 — s 41 Persei v 48 Eridani v 54 — v	85 10 + 5,06 102 35 + 7,81 48 0 - 4,67 93 45 - 4,16 110 0 + 4,21	- 4,84 + 1,25 + 4,18 + 3,41 - 4,44	+ 0,22 + 9,06 - 0,40 - 0,75 - 0,23	Greenwich place for 1831, differs — 2",78.
595 597 677 735 747	105 Tauri 2 Leporis ε 39 Orionis λ 34 Aurigeo β 61 Orionis μ	68 35 — 5,16 112 40 — 4,43 80 15 + 4,12 45 5 + 5,10 80 25 + 4,95	+ 3,73 + 2,52 - 4,38 - 3,94 - 3,67	1,43 1,91 0,26 1,16 1,28	
757 791 857 877 995	67 Orionis v 1 Canis Maj, z 16 ot 24 oe 15 Argus		- 3,75 - 3,93 + 2,18 + 3,02 + 3,35	+ 1,79 + 1,64 - 1,87 - 3,56 + 7,80	Greenwich place for 1831, differs - 1*,28. Greenwich place for 1836, differs - 1*,19,
1131 1179 1243 1254 1280	40 Lyncis r 29 Ursω Maj. υ Antl. Pneum α 47 Leonis ρ 46 Leonis Min. ο	54 55 + 4,44 30 15 + 5,04 120 15 + 4,24 79 50 + 5,01 54 55 + 5,60	- 3,82 - 3,68 - 3,08 - 3,36 - 3,82	+ 0,62 + 1,30 + 0,56 + 1,65 + 1,84	
1333 1338 1386 1575 1579	12 Hyd. and Crat. δ 78 Leonis ι 8 Virginis π 85 Ursæ Maj η 3 Centauri &	103 55 — 4,24 78 35 — 4,62 82 30 + 4,88 39 55 + 4.45 122 10 + 4,78	+ 2,20 + 3,07 + 0,62 - 3,75 - 0,63	$\begin{array}{c c} -2,04 \\ -1,55 \\ +5,50 \\ +0,70 \\ +4,15 \end{array}$	Greenwich place for 1836, differs - 97,75.  Greenwich place for 1837, differs - 27,06.
1607 1619 1620 1065 1681	l 1 Draconis \( \alpha \) 09 Virginis \( \alpha \) 16 Bootis \( \alpha \) 107 Virginis \( \alpha \) 9 Libres \( \alpha^2 \)	24 50 + 5,39 95 15 + 5,81 70 0 + 4,74 95 0 + 5,63 105 20 + 4,41	- 3,20 - 2,70 - 3,40 - 4,27 - 3,10	+ 2,19 + 3,11 + 1,28 + 1,36 + 1,31	Greenwich place for 1836, differs - 0",51.

No. in Voi. II	Names.	Division of from Greenwich.	err. dly.	Cor. diff. from Green- wich.	Romarks.
1700 1701 1787 1797 1803	7 Urs. Min. β 19 Libræ δ 44 — η 5 Lupi λ 37 Serpentis ε	15 10 + 7,86 97 55 - 4,30 105 10 + 4,01 123 10 + 4,49 86 0 + 5,30	- 4,37 + 1,26 - 4,37 + 2,03 - 5,07	+ 3,49 - 3,04 - 0,30 + 6,52 + 0,23	Greenwich place for 1837, differs 27,01  Greenwich place for 1837, differs -+ 07,02
1806 1816 1837 1838 1839	2 Scorpii Λι 6 — ρ 9 — ωι 10 — ω² 6 Herculis υ	114 50 + 5,63 118 45 + 7,73 110 15 + 6,28 110 25 + 4,96 43 30 - 4,11	- 3,20 + 3,34 - 4,13 - 2,92 + 2,22	+ 2,43 +11,07 + 1,15 + 2,03 - 1,89	The St. Helena Catalogue agrees better i. c. T. — J. == + 2",29.
19 <b>0</b> 2 1976 1986 2021 2028	13 Ophiuchi	100 15 + 4,18 66 0 + 4,48 114 50 + 5,69 98 0 - 4,10 102 50 - 5,03	- 4,17 - 3,01 - 3,20 + 2,46 + 2,56	+ 0,01 + 0,87 + 2,49 - 1,64 - 2,47	
2079 2105 2122 2164 2187	10 Sagittaril γ <sup>e</sup> 19 — δ 22 — λ 28 — 37 — ξ <sup>e</sup>	120 25 +10,18 119 55 + 6,11 115 30 + 4,09 112 35 - 4,27 111 20 + 9,48	- 2,64 - 3,93 - 2,93 + 2,62 + 0,50	+ 7,64 + 1,18 + 1,10 - 1,76 + 9,98	Greenwich place for 1831, differs 1",99  Greenwich place for 1831, differs 1",53
2196 2198 2213 2303 2313	38 Sagittarii	120 10 + 5,87 75 10 + 5,57 95 10 + 4,56 40 10 + 4,14 110 10 + 4,64	- 3,60 - 3,40 - 3,42 - 3,30 - 4,26	+ 2,37 + 2,17 + 1,14 + 0,84 + 0,38	Greenwich place for \{ \begin{pmatrix} 1831, \text{differs} & 0", 18. \\ 1837, \text{differs} & -+ 0 \ , 01. \end{pmatrix}
2371 2388 2501 2528 2546	67 Draconis ρ 6 Capricorni α <sup>2</sup> 23 — 0 32 — 6 36 — b	22 40 - 5,44 103 5 - 4,75 107 55 - 4,43 107 35 - 4,56 112 35 - 4,08	+ 2,52 + 3,11 + 2,26 + 2,06 + 2,52	- 2,92 - 1,64 - 2,18 - 2,61 - 1,56	
2561 2562 2665 2669 2661	73 Oygni ρ 23 Aquarii g 43 — θ 23 Cophei ε 46 Aquarii ρ	45 10 + 6,89 98 40 - 5,13 98 40 - 4,35 33 50 - 4,34 98 40 +16,33	- 3,42 + 2,65 + 2,65 + 2,83 + 2,55	+ 3,47 2,68 1,80 1,51 +18,88	Greenwich place for 1831, differs - 07,08
2696 2710 2764 2776 2776 2796	59 Aquarii v 42 Pegasi z 83 Aquarii h 92  x 4 Capricornl d	111 35 +10,15 80 5 + 6,39 98 40 - 5,21 98 40 - 4,43 28 40 - 4,37	+ 1,53 - 5,38 + 2,55 + 2,55 + 3,69	+11,68 + 1,01 - 2,60 - 1,88 - 0,68	Greenwich place for 1817, differs 4- 2",88

In addition to the above I may add the following, derived from page claxiii, ct seq. of the present volume.

A table of the larger differences (all above 3") between the determinations of declination at the St. Helena and Madras observations, together with the same corrected for error of division in the Madras Circle.

No. from B. Cat.	Name.	Division observed.	Differs from J.	err. div.	T.—J.	Remarks.
278 353 744 1389 1812	χ Erideni κ ——— α Doradus α Equ. Pict. R Argus	142 25 138 26 145 25 151 45 137 45	+ 3,5 + 3,2 - 4,2 + 3,4 + 4,6	$ \begin{array}{r}     -0.4 \\     -2.9 \\     +3.1 \\     -1.2 \\     -2.6 \end{array} $	$\begin{vmatrix} + & 3 & 1 \\ + & 0 & 3 \\ - & 1 & 1 \\ + & 2 & 2 \\ + & 2 & 1 \end{vmatrix}$	
2311 2326 2394 2762 6767	b <sup>2</sup> Argus c i Norms	148 30 136 30 151 40 143 50 124 55	+ 3,2 + 3,3 + 4,3 + 3,4 - 3,3	- 2,6 - 1,5 - 1,5 - 2,9 + 3,7	+ 0,6 + 1,8 + 2,8 + 0,5 + 0,4	
5828 7267 7274 7300 7330	η Arm γ Tucanee γ App. Sculp. β — —	148 45 149 10 123 30 128 45 119 0	+ 5,3 + 3,3 + 6,3 + 3,3 + 3,4	- 3,2 - 1,2 - 2,2 - 2,0 - 2,5	+ 2,1 + 2,1 + 4,1 + 1,3 + 0,9	Greenwich place for 1836, differs + 1"84

In conclusion I may state—that the discordances which have hitherto been met with in the Solar—Lunar, and Planetary observations, will, on applying the corrections from the above table,—in a great measure be got rid of, and the observations generally, will I believe be found to possess a considerable degree of accuracy.



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ERRATA IN THE BRISBANE CATALOGUE.

No. of Star in Briss   bane Catalogue.   S.   S.   S.   S.   S.   S.   S.				Т. — В. с	orrected.
	No of Stay in Prin	Column	Error. Correction.	M O.	Т.
Control   Cont		Commi		8.	S.
100		Aun Door In A. P.	<del>-</del> ·		_
1935		Ann. Prec. in A. M.		_	
718				\ <u></u>	
1046				l [	
1284				-3.82	
1294			-,	,,,,,	
1809				1 🗕 🗆	
1042 1705 1,910 1,910 1,144 172,125 1730 1,910 1,144 1,2,23 1816 1,034 1,077 1832 1,191 1,					'
1705 1730 2,118 2,141 2,142 2,23 1816 1832 1,784 1,804 2001 1,191 2044 1,134 1,1031 2110 1,195 1,1787 1,1889 2,144 1,191 2322 1,737 1,1889 2,144 1,1720 1,699 2,131 2,166 2,142 2,164 2,169 2,142 2,164 2,169 2,148 2,166 2,148 2,168 2,148 2,168 2,148 2,168 2,148 2,168 2,148 2,168 2,181 2700 2,147 2,160 2,248 2,164 2,13 2700 2,147 2,160 2,246 3066 2,2661 2,0565 3068 2,267 2,310 2,474 2,160 2,304 -0, 3056 3068 2,267 2,310 2,474 3,568 3,04 -0, 3,122 3,138 1,699 1,181 4224 A. R. 12,42 1,134 4203 4396 4093 Ann. Pres. in A. R. 8,111 4208 4396 4406 4,004 3,173 4565 4066 4,002 3,162 4,004 4,004 3,173 4566 4,002 3,162 4,004 4,004 3,173 4,004 4,004 3,173 4,004 4,004 3,173 4,004 4,004 3,173 4,006 4,002 3,968 4,002 3,968 4,003 4,004 4,006 4,008 5,009 5,269 5,288 5,309 4,008 5,009 5,289 5,288 5,409 5,290 5,288 5,409 5,290 5,29				-2.27	****
1738					
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1,720				-1,51	_
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2712					5,40
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4234       Ann. Prec. in A. R.       8,111       3,471         4269       3,518       3,479         4396       4,094       3,173         4565       3,714       3,744         4586       4,002       3,962         4626       3,576       3,707         4944       3,195       4,303         4961       4,074       3,868         4979       3,951       3,908       -2,59         5288       4,155       -2,59         5496       4,406       4,558       -1,49         5522       3,098       4,098       -1,49         5699       4,368       4,053       -1,68         6306       4,066       4,044       -2,70         6374       4,660       4,044       -2,70					
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CC0# 4.901 4.901				1	<u> </u>
HOAD SORE DOCE				19.1	l. <u> </u>

Which errors, having for the most part been discovered since the Catalogue in the present Volumo was in print, necessarily give rise to errors in the column " Difference from the Brisbano Catalogue"—hence the above column " T — B corrected." In addition to the above, the following errors have been detected.

## ERRATA IN THE PRESENT VOLUME.

		1,711157	'A IN THE PAR	SENT YOLU	ME.		
No.	Colu	91 <b>915.</b>	Erro	r'.		Correct	ion.
10	Declin.	for	37.	22"	read	37° 23	
78	Ann. Prec.		2s, 8			25,78	
,-	Log. c	parts.	0,31			0,444	
	A. R.	-		,37	p	45,4	
	Difference		- Îs			- 1s, 5	
304	A. R		14s	•		135,8	
1701	Difference		-3s, 19 &2s		9	s,98 & 1s.6	3
407	Ann. Prec.		18,		·	0.94	
40.	Log. o		0 ,28			9,975	
414	Deolin.		49.			49- 14	
484	Ann. Proc.	-	18,1			14,88	
701	Log. o	-	0,19			0,275	ī
505 /	Ann. Prec.		b 0,	0	${d}$	a, , , , , , ,	- l
303	18,326	+7.6939		+0,1225	<b>7</b> ,5934	+0,0237	+8,5
	A. R. = 49		-j- 2,00 av	-1-0,1240	Deelin,	7-0,0-0,	32' 52
	Diff. == +				Diff,		+ 0
787	Difference	for	10s	87	read	1 m. 0s,6	
	Ann, Prec.		ħ 100	0	đ	a <sup>3</sup>	ľ
		8,4688	- <b></b> -8,8350	+0,3906	. + 8,1173	+9,9020	+ 2,2
. Iµsert. 🤇		m. 53s,87	-L 010900	Difference	" de offilia	+0s,85 & -	
o//G	Ann. Preg.		<u>b</u>	O O	$\overrightarrow{d}$	+ 0s, 00 € →	
	15,293	-8, <b>72</b> 50	+9,0286	+0,1116	4 8,618 <b>7</b>	+9.9934	+ 9,50
	A. R. 48		7 3,0400	4. Ollifo		0, 38, 80	امردو ساء
	Difference	<del>-3,22</del>	Distriction of the last of the		Declin.		
	Ann. Preg.	— 0,AA	6		Différence		,
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Turnet 9			A- 810922	+0,0993	+ 8,6892 .		
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	Difference Magnitude	3,29 for	(† H	in the second	Difference	- 1,66	77
946	Magnitude		6,7 8		read		7
947	And Duce	. —			<del></del>	4.7	•
	Ann. Prec.		18,319			21,31	
1121		· ·	2,083			9,2	
1228	Difference B. No.	-	3,07			<del>-</del> -30,∫	
1353	Declination		2478				70 80
			499		<u> </u>	The second secon	
1617	A. R. Difference		365,59	1.9		34s,	
			-2,71	, ,		ر () در ()	
1643		_	3016			.1.16.9*	
1667			+1*,315			十1 <sup>,</sup> 3 <sup>,</sup> , 30	
1679			8065	to.			
2131 2396			+2s,16 & +1s,	อย .		-2s, 14 & -1m. 3s,	
			-135.20			— 1 <i>m</i> . 3 <i>s</i> ,	
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2866			koliunge places.			ı of	Λη.
3019	Difference	for .	+007,9	_	read	+0',	O9
3280	Ann. Proc	3. <i>a</i>	υ 0 0010	0	d 8 0461	<i>a</i> 0 8 6 8 0	0.0
	48,154	+8.9434	8,8310	4.0,6185	8,8461	9,3579	¥,8
Insert.	) A. K. =	29m. 1,90s.		Declin.		<u>-4' 38',20</u>	-
,	CDiff.	2,02		Diff.	<del></del>	+2,02	4- <del></del>
			17	37	**		. 4.
	•		DITIONAL ERRA		_	•	1 12 1
	Pа	me CXXVIII	No. 2801 N.P	.D. for 18'.	43 read 32'.9t	i	J. 19 F

age CXXVII No. 2801 N.P.D. for 18',43 read 32',

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